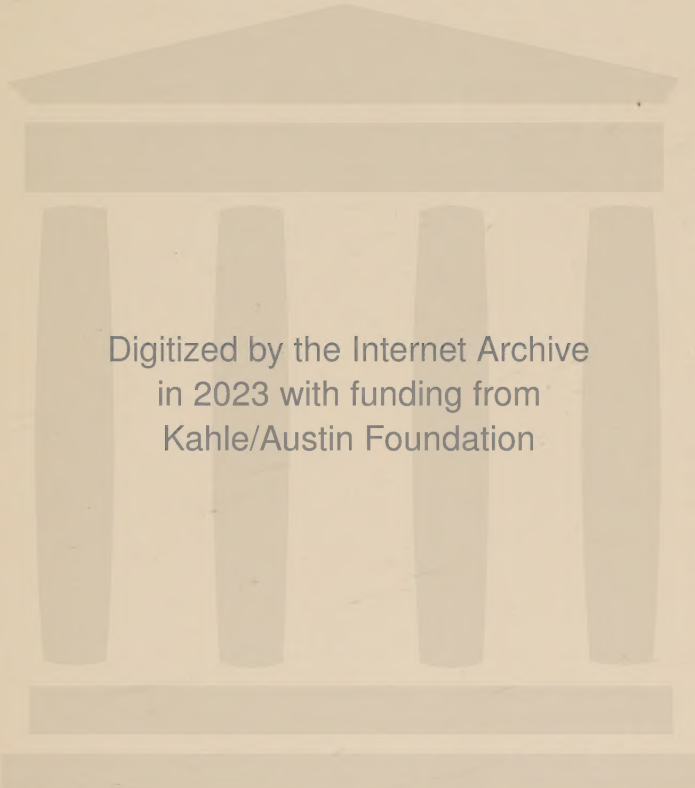


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*IN QUEST
OF THE
WESTERN OCEAN*

*IN QUEST
OF THE
WESTERN
OCEAN*

By
NELLIS M. CROUSE, Ph.D.



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IN QUEST OF THE WESTERN OCEAN

INTRODUCTION

THE LURE OF THE FAR EAST

Demand for Oriental goods in Europe.—Trade routes between East and West.—Commercial establishments in the Levant.—Early voyages to the Far East; Carpini and Rubruquis.—Marco Polo.—Knowledge of the East filters into Europe.—Early attempts to find a water route to Asia.—Henry the Navigator.

WHEN Columbus returned from his epoch-making voyage in the year 1493, bringing to Spain the welcome news of the lands beyond the sea, the imagination of Europe was fired by the belief that an all-water route to the land of silks and spices had been found. This conclusion, erroneous as it soon proved to be, was but natural under the circumstances, for the geographers of that day were unable to estimate correctly the vastness of the earth's circumference. The newly discovered regions were, therefore, regarded as islands off the Asiatic coast. How long this belief lingered it is difficult to say, for the evidence we glean from various maps is subject to different interpretations, but as Columbus and his contemporaries extended their explorations to the mainland it gradually dawned upon men that a new world, either continental or insular, had actually been found. What was the nature of this new world? Was it an archipelago situated midway between Asia and Europe, or was it a new continent stretching across the route to the Far East, or was the North American portion of it, as some professed to believe, an eastward extension of Asia itself, with South America attached to it by a slender isthmus? Opinions, of course, varied; but whatever may have been the different opinions all men were united in the desire to

find a passage around it or through it to the land of Cathay, and later, as the true nature of the obstacle became generally known, across it by means of a chain of lakes and rivers. It is the purpose of this book, then, to trace the work carried on by explorers in their efforts to find the route to the Western Sea, that mysterious passage which for three centuries served as an incentive for discovery to those who sought a short cut to the Far East; and even long after the worthlessness of such a passage for practical commercial purposes had been established, the search for the Northwest Passage lingered as a sort of scientific sporting event. With this later phase, however, we shall not concern ourselves, as we are interested only in the period when the work of exploration was guided by a desire to obtain a closer connection with the East. Our story, then, will deal with the enterprises of the English in searching for a route around the North American Continent, and also with the attempts which the French made to cross it, lured on continually by the stories which the Indians brought them of the Western Sea. The Spaniards, it may be said, withdrew early from the contest, satisfied with the trade which they carried on with Cathay by way of Mexico, while the Portuguese confined themselves, after one or two abortive attempts, to their monopoly around the southern extremity of Africa. But since it is always advisable before narrating a series of events to give a brief résumé of the causes that led to them, the present chapter will be devoted to a discussion of the commercial conditions of the Middle Ages that made it imperative for the nations of Western Europe to seek an all-water route to the Far East, and to a description of the stories in circulation about the Oriental lands, which acted as a lure to the adventurous.

During the twelfth and thirteenth centuries the Crusades brought Europeans in touch with the culture, refine-

ment and luxury of the Moslem world, and the Knights of the Cross learned to their surprise that the infidel hosts were composed of men whose elegance of life surpassed their own. Returning from the Holy Land it was but natural for the Crusaders to turn from the crudeness they found awaiting them at home and endeavour to soften it with the luxury of the East. As time went on things that at first had been only a luxury reserved for the wealthy became a semi-necessity to a large number of people. These luxuries consisted of goods which were obtained from Asia and could be obtained, so far as was then known, nowhere else. As the demand for them grew the supply increased to meet it until it became an important factor in the economic life of the European world.

Goods imported from Asia may be divided roughly into four groups. 1. Spices, which formed, perhaps, the most important item, if we measure importance by the criterion of utility, consisted principally of pepper, ginger, cinnamon-bark, nutmegs, mace, cloves and allspice. While to-day the use of spices is largely a matter of tickling the palate, the gourmands of the Middle Ages found them a necessity, for cooking was coarse, and could not be classed as a fine art; and in addition to this there were no methods of preserving meat, such as refrigeration and canning. Pepper appears to have been the most valuable spice; it was grown in the forests skirting the Malabar coast on the southwestern shore of India. The great demand for this condiment caused the Venetians for many years to purchase annually four hundred and twenty thousand pounds from the Sultan of Egypt; and one of the first vessels to return from India brought two hundred and ten thousand pounds in its hold. Of lesser value was the cinnamon-bark that grew in the island of Ceylon and on the western coast of India, while nutmegs, cloves, allspice and mace, spices grown on a small group of

islands in the Malay Archipelago, were imported in lesser amounts. 2. Next in value were precious stones. These during the Middle Ages were used principally for decorative purposes, and could be obtained only in Asia. They formed the crown jewels of kings, adorned the garments of the wealthy, and were used to ornament the sacred vessels of the Church. In addition to this, precious stones had something of a utilitarian value as they provided a handy medium for the transportation of large sums of money at a time when facilities of exchange were undeveloped. Travellers were able to secrete jewels about their persons and thus carry with them sums that would have been too bulky in the form of gold or silver. Diamonds, the most valuable of the precious stones, were found only in the central part of India. Rubies, too, came from India, and they were also found in Ceylon, in the highlands of Persia, and along the Oxus and Jaxartes Rivers. Sapphires and the semi-precious stones were products of India, while pearls came chiefly from Palk Strait, the channel that separates Ceylon from the mainland, and in certain parts of the Persian Gulf.¹ 3. Drugs, perfumes (a necessity in days when bathing was unpopular), fragrant woods and sugar-cane were also Eastern products, and came from much the same countries as the spices and precious stones. 4. Silks and fine cotton fabrics came from China, India, Cashmere and Persia. Besides these four general classifications we could mention objects fashioned from glass or metal, executed with a skill that could not be matched in the West.

Trade in the articles enumerated above was carried on over three main routes that divided, when they reached western Asia, into five branches. The northern route led from central Asia through the towns of Samarcand and Bokhara to the Caspian Sea, where the main artery separated into two branches. One of these led to Astrakhan, a town

situated on the mouth of the Volga at the northern extremity of the Caspian. Here the traveller ascended the Volga a short distance, then crossed over to the Don, which he descended to the Venetian settlement of Tana on the Sea of Azov. The southern branch bore away to Tabriz and thence to Trebizond on the Black Sea, where Christian merchants held certain concessions. At Tabriz the route divided again, and connection was made with Lajazzo on the Gulf of Alexandretta. The second route (tracing it from west to east) led from Lajazzo, or some convenient port south of it, to Bagdad, where the Tigris River offered navigation to the Persian Gulf, from which India could be reached by water. The third route was substantially an all-water one. Traders ascended the Nile a short distance and then transported their goods to the Red Sea where they could find ships that would take them directly to India.² The means of transportation over these routes were various. Vessels, river boats, camels, horses, carts, even the backs of men were used to convey the goods. Overland caravans suffered from the attacks of brigands, and were further annoyed by imposts laid upon their merchandise by the governors of districts through which they passed; while storms and the depredations of pirates enhanced the difficulties of shipments venturing by sea. All these things added greatly to the cost and made desirable a direct route to the East far removed from the well-known trails. Of the two methods of transportation shipping by water was less expensive than overland travel, and it could be used for shipments coming all the way from India and China and vice versa. It had, however, this objection: the more expensive spices were liable to suffer damage by so long an exposure to the sea air.

Trade along the southern route was largely in the hands of Mohammedan intermediaries, for the Red Sea during the thirteenth and fourteenth centuries was generally closed to

Christian travellers by the Mamelukes, though there are instances of relaxation when Christians were allowed to slip through. This did not mean that trade was interdicted; on the contrary goods flowed into Alexandria by the Red Sea route and were turned over to Christian merchants established there. But as time went on the popes viewed the trade through Alexandria with increasing feelings of hostility, for they had no desire to have Christians deal with those who had been instrumental in driving the Crusaders from Palestine, and consequently the Holy See made repeated attempts to reduce the trade through Egypt. By the second quarter of the fourteenth century the greater portion of the business was diverted to the northern routes.

The custom of having Christian merchants as residents, which we have seen held in Alexandria, was fairly general throughout the Levant. Europeans—generally Italians with a scattering of French and Spaniards—had quarters called *fondachi* granted them by the Saracen emirs of the Greek Emperor in several ports and towns of Asia Minor. We find them established in Alexandria, Acre, Beirut and Constantinople, while concessions are also met with in Damascus, Antioch and Aleppo; indeed, the Italians for generations made up a large part of the population of the Levantine cities. From these seaports and towns along the coast the Genoese spread eastward and established settlements in cities farther inland, and also along the Black Sea. Genoa founded Kaffa in the Crimea as a point of vantage on the northern route, and so extended her dominions that she held a sort of colonial empire in the peninsula. Pioneers were dispatched thence to the Caspian Sea, and a strong bid was made for the mastery of the Black Sea by the erection of factories at the mouth of the Danube and at Trebizond.³ The Genoese also entertained the ambitious scheme of creating a central port for Indian trade on the Persian Gulf, in

order to divert the traffic in Eastern goods to their own channels, and they also hoped to station a fleet at Aden to intercept Red Sea commerce and cut this line of communication between Asia and Egypt. The Venetians for their part had established a post at Tana on the Sea of Azov, and besides this attempted with a considerable measure of success to gain a more southerly route to the East. By virtue of a treaty (1319) with the ruler of Trebizond they obtained permission to create establishments in his territory, and the following year a similar treaty with the Ilkhanate secured them liberty of travel in the Persian Empire.

The struggle for commercial supremacy between Venice and Genoa was not confined to Asia. In Europe the former had certain natural advantages over her less fortunate rival. The routes from Venice to northern and central Europe were more direct than those from Genoa, and, furthermore, she had better means of communication with towns lying in the valley of the Po.⁴ The distribution of Oriental goods by Venice to the more remote parts of Europe went on by sea and by land. Fleets of galleys were dispatched yearly to Sicily and Spain in the Mediterranean, and passing through the Strait of Gibraltar made their way to Portugal and occasionally to England and Flanders. By land the business was chiefly in the hands of foreign merchants, though the Venetians themselves participated in the traffic, and these foreigners maintained establishments in Venice similar to those which the Venetians maintained in the Levant. The Germans were the principal traders in this sort of business and carried the goods purchased in Venice to the French and Hanse cities. From these towns a portion was reshipped to England. We have, then, a line of trade extending from the farthest confines of Asia and the Spice Islands, with its branches concentrating at the eastern end of the Mediterranean where the goods were picked up by

Italian merchants, who carried them to their home ports and relayed them across Europe through France and Germany to the cities of Flanders and the Hanseatic League; or, loading them again on their ships transported them to the Iberian Peninsula and sometimes to England. The cost of this transportation was enormous; the length of time taken on the voyage through Asia, the occasional losses by storm or robbery, the large number of middlemen through whose hands the goods must pass, the various rulers who levied imposts on the merchandise that crossed their territories, all these things must be added to the original value in order to secure even a reasonable profit. The excessive prices were most keenly felt by the ultimate consumers who were situated farthest from the source of supply; that is in countries such as Spain, Portugal and England. While the business of transportation enriched the Italian cities, who could reship the already expensive merchandise to other traders situated beyond them, the westernmost nations had no such opportunity for making a profit, and, what is more, the cost rose still higher as the goods passed through a new string of middlemen after leaving Italy. It was estimated at Venice that articles which had originally cost a ducat were worth seventy to one hundred when they reached Italy. As a result of this condition there arose in the westernmost nations a desire to secure Eastern products at a lower cost. This could be done only by discovering an all-water route to the East, either by going around the southern point of Africa or by sailing directly west. It was these western countries, then, as we shall see, that assumed the burden of exploration. The cost of direct transportation from India to western Europe by Cape of Good Hope was but a trifle compared to that over the eastern routes; indeed the cost by the Cape route was less than the cost of the land portion only of the route by the Persian Gulf. A calculation made in the year 1800

shows that a shipment from India to France by the Red Sea would yield a profit of only four per cent., while the same shipment sent around Africa would make from thirty-six to forty-eight.⁵

Meanwhile events were taking place in Asia which caused a violent disturbance in the flow of traffic from the East, and which had a considerable bearing on the desire to find an unobstructed route to Cathay and India. During the years of Mongol supremacy in Cathay Europeans had enjoyed a period of friendly commercial intercourse with that country. This was established, as we shall presently see when we come to examine the work of European travellers in Asia, by the Franciscan missionaries, Carpini and Rubruquis, and by the Venetian trader, Marco Polo, in the thirteenth century. The Chinese revolution of 1368, however, broke the power of the Mongols in China and marked the beginning of a series of events that greatly curtailed Oriental trade. At the death of Tamerlane, the Mongol chieftain (1405), anarchy broke out in upper Asia putting an end to Christian trade and missions beyond the Black Sea. The northern routes being thus obstructed, the Venetians and Genoese appealed for relief to the Pope, who, it will be remembered, had discouraged, if not actually forbidden, trade with the Mamelukes of Egypt. As a solution of the difficulty the Pope established a system of licenses permitting traders to deal through Egypt, and thus a flourishing business was developed through the Red Sea with a consequential reduction of prices, since transportation by water was cheaper than conveyance by caravan.

The Ottoman Turks added to the confusion. Beginning as a small tribe south of the Sea of Marmora they gradually, after 1300, spread themselves through the Levant until, in the course of the next two centuries, they had acquired control of the Balkans, Asia Minor and the southeastern shore of the Mediterranean, and also held dominion over

the Sea of Azov. Thus the western termini of the trade routes eventually fell into their hands. But the process was so gradual that it cannot be said that it was the sole cause of the Europeans seeking the water passage to the East, especially as the Red Sea route did not fall into Turkish hands until after Columbus had completed his voyages and da Gama had returned with his cargo of spices. Though the blocking of the trade routes has often been laid to their door, the Turks were not entirely responsible for it; on the contrary, no sooner had they recovered from the onslaughts of Tamerlane than they organised a caravan trade between Brusa, Aleppo and Tabriz. Meanwhile the Mamelukes absorbed Lesser Armenia (Cilicia) and held it for one hundred and forty years, thus gaining control of the middle and southern routes which they kept open to Christian merchants until after the voyage of da Gama.⁶

When the Turks captured Constantinople in 1453 they allowed the Christians to retain their trading privileges, but declined to permit them to meddle with internal affairs. Venetian and Genoese merchants had in the past acquired considerable land in Turkish spheres of influence, and, what was more objectionable from the Turkish point of view, they maintained certain political rights which they had obtained before the Ottoman conquest. All this was the source of much friction and hostility. The Turks were conquerors, not traders, and there was a lack of that sympathy between them and the Italians which had existed between the latter and the Moslems of Asia Minor before the Turks had risen to power. To a certain extent the Turks regarded the Italians with that mild contempt which a fighter feels towards a man of affairs. Gradually they encroached upon the Italians, seizing their island possessions in the Ægean. By the year 1500 Venice had lost her foothold in the Levant, and, although other Italians who held no territory managed

to keep up commercial intercourse with the Ottomans on a small scale, the backbone of the business was broken.

Turning back now to the time when this trade was flourishing and Eastern goods were being relayed from the Far East to the Near East, from the Near East to Italy, and from Italy to the westernmost points of Europe, we find that accounts of the unknown Asiatic regions had begun to filter in through the narratives of Christian missionaries and travellers. The wonders of the Orient were first disclosed to the priests and traders who had followed the Crusaders to Palestine where they learned of the treasures that awaited them in the furthestmost parts of Asia. The Crusaders, however, did not seize this occasion to undertake the exploration of Asia, so busy were they with the work at hand, but contented themselves with buying Oriental wares from the merchants who brought them to Asia Minor. Towards the close of the Crusades, in the middle of the thirteenth century, an event took place which led to the first voyages to central Asia; and those first voyages proved to be the beginning of a series of travels that brought eastern Asia in closer touch with Europe. The son of Genghiz Khan, the Mongol Emperor, had detached a portion of his mighty army to subjugate the lands beyond the Caucasian Mountains. This host, under its leader, Batu, overran Russia and invaded Poland, burning Cracow and defeating the Christian army at Lignitz in 1241. Alarmed at the barbarian menace Innocent IV called a council at Lyons in 1245 for the purpose of devising some means of protecting Christendom. A crusade was preached; but the hostility existing between the Pope and the Holy Roman Emperor prevented any unified action being taken. Innocent therefore determined to try a more conciliatory measure in dealing with the Mongol horde; he would send missionaries to labor for their conversion, and thus turn foes into friends. This expedient was not so impractical as it might

seem at first glance, for the Mongols were not Mohammedans, in fact they were themselves at war with the Moslems, and were inclined to regard the Christians as co-belligerents against a common enemy. In the end the Pope's prognostication proved correct, and his missionary friars met with an encouraging amount of success. It is to these friars, then, and especially to the Franciscans, that we are indebted for our first authentic knowledge of Cathay and the Tartars, for these men revived knowledge of the Eastern nations which for generations had been almost forgotten; and now the kingdom called Cathay was first heard of in Europe.⁷

John de Plano Carpini, a Franciscan friar, whom the Pope dispatched to the Mongol Emperor in 1245, was the pioneer among these emissaries. Setting out from Lyons he made his way to Bohemia where he was granted a cordial reception by the King. From there he proceeded to Kiev by way of Silesia. It is not our intention to give a detailed account of Carpini's voyage to the Mongol country; suffice it to say that after a journey of about fifteen months he reached the court of the Great Khan at Karakorum in the heart of Mongolia. Here the friar obtained a little information—the first obtained by a European—on the location of Cathay, and the nature and wealth of its inhabitants. He writes in his narrative: "But some part of the country [of Cathay], because it lyeth within [on] the sea, they [the Mongols] could by no means conquer unto this day. The men of Cathay are pagans, having a special kind of writing by themselves, and (as it is reported) the Scriptures of the Old and New Testament. They have also recorded in histories the lives of their forefathers: and they have eremits, and certain houses after the manner of our churches, which in those days they greatly resorted unto. They say that they have divers saints also, and they worship one God. They adore and reverence Christ Jesus our Lord, and believe the article of

eternal life, but are not baptized. . . . In all occupations which men practice, there are not better artificers in the whole world. Their country is exceeding rich, in corn, wine, gold, silk, and other commodities.”⁸

Shortly after Carpini's return Louis IX of France sent William de Rubruquis, a Flemish Franciscan, on a mission to the Mongol Emperor. The friar departed in 1253 with instructions from the King to proceed, not as an ambassador, but as a minister of the Gospel. The narrative of his travels gives more copious information on the countries visited than does that of Carpini; Rubruquis is also more liberal in his treatment of Cathay. He was the first European to identify the inhabitants of that country with the Seres of classical times.⁹ In his account he says: “There is also great Cathay, whose people were anciently, as I believe, called Seres. From among them come the best silk stuffs (which are called *seric* by that people), and the people get the name of Seres from one of their cities. I was given to understand that in that region there is a city with walls of silver and towers of gold. In that land are many provinces, the greater number of which do not yet obey the Moal [Mongol], and between them and India there is a sea. These Cathayans are small men, who in speaking aspirate strongly through the nose, and in common with all Orientals, have small openings for the eyes . . . and I questioned priests, who had come from Cathay, who bore witness to it, that from the place where I had found Mangu Chan to Cathay was twenty days journey between south and east; while to Onan Kerule, which is the true country of the Moal, and where is the *ordu* [Mongol chief] of Chingis, was ten days due east, and that all the way to these eastern parts there was no city.” Such were the reports of Cathay written by the first of mediæval explorers, reports based not upon personal observation, but upon hearsay information gathered in east-

ern Asia. There was little in these narratives to fire the imagination of Western Europeans; no tales of fabulous wealth, of mighty cities, of great centres of trade compared to which Venice and Rome shrank into insignificance, merely a vague mention of a city with "walls of silver and towers of gold," nothing beyond a traveller's yarn which must be accepted with caution. To pious persons the heathen Mongol might appear as promising material for evangelisation, especially as they appeared to have some traditions in common with Christianity; but the trader—and it was for purposes of trade that the route to the East was sought—was obliged to await the return of that greatest traveller of the Middle Ages, Marco Polo, before he felt the call of the East.

Marco Polo was the son and nephew of Nicolo and Maffeo Polo, Venetian merchants, who made a journey to the capital of Cathay in 1260. On their second voyage which started in 1270, Marco then but a youth of seventeen accompanied them, and the account written by him of his experiences in Asia has become the classic of Asiatic exploration. Polo added to his capacity for making and recording observations a vivid imagination and an unusual ability for giving descriptions, and because of this many of his statements have the appearance of exaggeration based on a certain amount of truth, for the figures he gives in regard to the number of inhabitants in the principal cities of Cathay could scarcely have been borne out by an accurate census. For example he describes Quinsai, the City of Heaven (modern Hang Chau), as being one hundred miles in circuit, with twelve thousand bridges of stone, and boasting of twelve thousand guilds, each with twelve thousand houses, and each house containing from twelve to forty workmen.¹⁰

Polo was well received at the court of Kublai Khan, the reigning Mongol Emperor. This ruler appears from all ac-

counts to have been a man of less barbarous instincts than the fierce Mongols over whom he ruled, for he sought to govern by justice rather than by force, and was keenly interested in furthering the industrial and commercial pursuits of his subjects. He was tolerant of Christianity, and during his reign, as well as during those of his successors, Christian missions enjoyed a peaceful existence. Marco Polo in the second book of his narrative introduces us to the Khan in the following words: "In this book it is our design to treat of all the great and admirable achievements of the grand Khan, now reigning, who is styled Kublai-Khan; the latter word implying in our language lord of lords, and with much propriety added to his name; for in respect to number of subjects, extent of territory, and amount of revenue, he surpasses every sovereign that has heretofore been or that now is in the world; nor has any other been served with such implicit obedience by those whom he governs."¹¹ The writer then proceeds to give examples of the great Khan's wealth, for speaking of Kambalu (Peking), the capital of Cathay, he says, possibly with some exaggeration: "To this city everything that is most rare and valuable in all parts of the world finds its way; and more especially does this apply to India, which furnishes precious stones, pearls, and various drugs and spices. From the province of Cathay itself, as well as from the other provinces of the empire, whatever there is of value is carried thither, to supply the demands of those multitudes who are induced to establish their residence in the vicinity of the court. The quantity of merchandise sold there exceeds also the traffic of any other place; for no fewer than a thousand carriages and pack-horses loaded with raw silk, make their daily entry; and gold tissues and silks of various kinds are manufactured to an immense extent." The large amount of goods that passed through the ports and principal cities of Cathay enabled the Khan to enjoy a

substantial revenue and to accumulate an immense treasure. The government issued a form of paper currency that was made legal tender throughout the empire, and merchants who brought gold, silver and precious stones into the country were compelled to surrender them in exchange for this script. This did not impose any hardship on the traders for they could use the paper money to purchase goods which they wished to sell at home. In addition to this means of obtaining revenue the Khan levied a duty upon merchandise imported and exported. "In the first place," says Polo, "upon salt, the most productive article, he levies a yearly duty of eighty tomans of gold, each toman being eighty thousand saggi, and each saggi fully equal to a gold florin, and consequently amounting to six millions four hundred thousand ducats. . . . The twelve classes of artisans, of whom we have already spoken, as having each a thousand shops, and also the merchants, as well those who import the goods into the city, in the first instance, as those who carry them from thence to the interior, or who export them by sea, pay, in like manner, a duty of three and one-third per cent.; but goods coming by sea from distant countries and regions, such as from India, pay ten per cent. So likewise all nature articles of the country, as cattle, the vegetable product of the soil, and silk, pay a tithe to the king. The account being made up in the presence of Marco Polo, he had an opportunity of seeing that the revenue of his majesty, exclusively of that arising from salt, already stated, amounted in the year to the sum of two hundred and ten tomans (each toman being eighty thousand saggi of gold), or sixteen million eight hundred thousand ducats." ¹² Here, indeed, was an authentic record of the Great Khan's wealth, for Polo himself claims to have been present at the computation of the revenue, and we must accept the figures as being reasonably correct. But in addition to riches measured in gold and sil-

ver we find in Polo's book another source of wealth in the form of pepper (which, be it remembered, was the king of spices) imported in large quantities by the Cathayans. "The quantity of pepper," says Polo, "imported there [city of Zayton] is so considerable, that what is carried to Alexandria, to supply the demand of the western parts of the world, is trifling in comparison, perhaps not more than the hundredth part. It is indeed impossible to convey an idea of the concourse of merchants and the accumulation of goods, in this which is held to be one of the largest and most commodious ports of the world."

Marco Polo did not visit Japan, but he obtained some information regarding that picturesque land which he weaves into his narrative with a considerable amount of exaggeration. It is, perhaps, unfair to charge Polo with a deliberate intent to deceive his hearers, at the worst he appears guilty of too great credulity; and, moreover, travellers in those days, particularly travellers who had visited remote and little known regions, were few and far between, and their hearers expected from them an interesting story rather than a careful and critical analysis of the things they had seen. As a sample of Polo's account of Japan we may cite the following: "Zi-pangu [Japan] is an island in the eastern ocean, situated at the distance of about fifteen hundred miles from the mainland, or coast of Manji.¹³ It is of considerable size; its inhabitants have fair complexions, are well made, and are civilised in their manners. Their religion is the worship of idols. They are independent of every foreign power, and governed only by their own kings. They have gold in the greatest abundance, its sources being inexhaustible, but as the king does not allow of its being exported, few merchants visit the country, nor is it frequented by much shipping from other parts. To this circumstance we are to attribute the extraordinary richness of the sovereign's palace, according to

what we are told by those who have access to the place. The entire roof is covered with a plating of gold, in the same manner as we cover houses, or more properly churches, with lead. The ceilings of the halls are of the same precious metal; many of the apartments have small tables of pure gold, of considerable thickness; and the windows also have golden ornaments. So vast, indeed, are the riches of the palace, that it is impossible to convey an idea of them. In this island there are pearls also, in large quantities, of red (pink) colour, round in shape, and of great size, equal in value to, or even exceeding that of the white pearls."

Marco Polo's influence on the geography of his day was insignificant. This may have been due to a tendency on the part of cosmographers to regard his book more as an adventure into the realms of fancy than as a compilation of geographical facts. Then, too, as Polo's book was written before the invention of printing it was difficult for those interested in geography to gain access to his work. Thirdly, we must remember that mediæval geography and map-making, especially where unknown countries were concerned, were based on traditions which the cartographers were extremely reluctant to abandon. It was not until the fifteenth century was half spent that map-makers made any serious attempt to set tradition aside and study the reports of travellers for the purpose of rectifying their sketches.¹⁴ The Catalan map, constructed in 1375, is probably the first attempt to give the geographical outlines of eastern Asia based on the data furnished by Marco Polo, for its author has endeavoured to set aside the scientific and theological theories that cramped his predecessors, and to produce a sketch in keeping with the most recent information he could gather.

The influence of Polo on the men who sought to discover a route to the East was, no doubt, great, especially during the early stages of exploration along the western coast of Africa

and in America. We may cite as evidence of this the presentation of a copy of his book to Prince Henry the Navigator, by his brother Prince Pedro, when Henry was beginning his series of expeditions along the African littoral to find an all-water route to India. Later, a Latin version of the Venetian's narrative came into the hands of Columbus. Indeed, how could Polo have failed to exert influence on exploration when the principal object of the search was a desire to obtain the products of Asia at a cost lower than that which must be paid to the Levantine traders? Here in Cathay, Polo told them, were gold, silks, pearls and spices, in quantities greater than the imagination could compass, and these might be loaded on European vessels and shipped directly to European ports. The great abundance of these goods would suffice for all.

During the fourteenth century Europeans showed considerable interest in the East. The travels of Polo had disclosed the possibilities of trade with the rich countries of farthest Asia, and the labours of Plano Carpini and Rubruquis had opened a rich field for the missionary. To discuss in detail the voyages of this period is beyond the scope of this work, so we must content ourselves with a brief mention of the more important travellers and their writings. This will give us an idea of the state of geographical knowledge in Europe at this time, and the influence which the Far East was gaining on the minds of men; for it was this influence that formed in later centuries the background of the efforts to find the route to Asia through the American Continent. The fourteenth century is rich in material referring to China, India and the Spice Islands, which shows that Europe was in closer touch with Asia during this period than we are apt to imagine. After the Chinese revolution of 1368, when the Mongol dynasty was overthrown, communication with the Far East suffered a partial eclipse. But the

knowledge once gained was never lost, the economic reasons for opening a direct Eastern trade did not diminish, and the work begun by Henry the Navigator eventually reached its fruition.

In the first decade of the fourteenth century Marino Sanuto, a Venetian, produced a work that contained the very latest information on geography. The *Secreta Fidelium Crucis*, as the book was called, was written for the purpose of reviving the crusading spirit which for many years had lain dormant. Sanuto gradually enlarged his work and published the final version in 1321, under the title *Opus Terræ Sanctæ*, a copy of which, together with appropriate maps, was presented to the Pope. The author, whose crusading zeal rendered him opposed to all dealings with the infidel, attempted to show that Christian merchants could obtain Eastern products without trading through the lands of the Sultan at Cairo. In developing his argument he gives a description of the great trade routes and emphasises the feasibility of diverting trade from Egypt to the ports of little Armenia. His object was to build up a system whereby the entire country from northern Europe to the Indian Ocean should be controlled in behalf of Christian commerce and administered by a Christian government; for his ultimate purpose was not the recovery of Palestine from the hands of the Moslems, but the gradual extension of Christian civilisation and the suppression of the Moslem forces that hemmed it in. It was a crusade on a vast scale, more vast, in fact, than the undertakings of the past two centuries. Sanuto also advocated an alliance with the friendly Mongol tribes, especially with the Persian branch.¹⁵ His book was written shortly after the last Crusaders had been driven from Asia Minor, and the fate of Christendom filled men with apprehension.

The same year that Sanuto published his *Opus Jordanus*

of Séverac was sent as a missionary to India. From his letters and from his *Book of Marvels* (*Mirabilia*), published between 1330 and 1340, there was gleaned a considerable amount of knowledge regarding the geography, inhabitants and products of India, and the author also adds some facts concerning central Asia and the eastern islands. Jordanus has an interesting theory regarding the location of the Kingdom of Prester John, that mythical principality which for years had been the subject of curious speculation. It was said to be somewhere in northern Asia. No one, of course, had visited it, but travellers were always on the lookout for its whereabouts, and were inclined to apply the name to remote countries whose location was reported to them. Jordanus in his account of Abyssinia evidently considered the Abyssinian ruler to be the successor of Prester John, and we now find the legendary kingdom transferred to Africa. This in itself is not important, but Henry the Navigator may have been influenced by it, as one of the objects of his explorations along the African coast is believed by some to have been the discovery of this mythical land.¹⁶

Friar Odoric of Pordenone added much to the knowledge of the East by the travels he undertook between 1316 and 1330. He visited India, Java, Sumatra, Borneo and Cochin China, and also resided for some time in China, where he obtained evidence to support the descriptions given by Marco Polo. The famous city of Quinsai is described by him with its twelve thousand stone bridges, its huge area, its population, its commerce and its wealth. His accounts, it must be said, were not based on hasty judgments, for his long residence in the country enabled him to visit the places mentioned in his narrative. His *Description of the East* is considered the most valuable record of its kind in the fourteenth century, for its copious descriptions, its vivid narra-

tive, its intelligent observations place it in the same rank with the book of Marco Polo, where it forms an interesting supplement to Polo's work.

Trade had its emissaries as well as the Church. The records of merchants who penetrated to the East, save those of Marco Polo, have not been preserved as have those of the missionaries; yet it is evident, from various sources, that eastern Asia was reached by European merchants, and that a fair amount of business was transacted by these men. The most famous work on Eastern travel by a layman is the *Book of Sir John de Mandeville*, published between 1337 and 1371. In its day and for many generations afterwards its influence was enormous, especially in England, where it was read with great avidity; nor did it lack popularity in other countries for it was translated into several different languages. Subsequent examination has proved it to be an imposture. It was the work, not of a traveller, but of a physician of Liège, who had collected excerpts from the writings of others and had woven them together into an interesting narrative. Though worthless from a scientific standpoint it acted as a stimulus to the imagination in exciting interest in things Asiatic, and it had such a profound influence that Mandeville remained an idol for generations to come. Samuel Purchas, whose knowledge of matters pertaining to geography and travel was considerable, thus refers to Mandeville in speaking of the service rendered by Ramusio in preserving Polo's story: "O that it were possible to do as much for our countryman Mandeville, who next this [Polo] (if next) was the greatest Asian traveller that ever the world had."¹⁷ Towards the close of the fourteenth century, then, we find that a substantial body of material dealing with the countries of the Far East had been collected. The information gathered by travellers pictured farthest Asia, with all the enchantment that distance lends, as a land of

vast wealth, rich in the commodities which formed the luxuries of Europe, a land of gold and silver, of silks and spices, a land of cities that dwarfed the proudest towns of Europe. And thus the lure of the East became a potent incentive to the explorations of da Gama and Columbus, and later to those of English adventurers who attempted to find the route around the North American Continent.

The possibility of a water route to the East around the African Continent awakened interest in Europe long before the days of Henry the Navigator. We have a record, though by no means a certain one, of an expedition starting from Genoa in 1270 under one Lancelot Malocello. There is no positive proof that its object was the discovery of a route to India, although the fleet is believed to have passed through the Strait of Gibraltar and sighted the Canary Islands. From this fact some historians have inferred that its goal must have been Asia. But we have more definite information about a second expedition which started in 1291 under Doria and Vivaldo, and which is known to have had India as its destination, and the purchase of a cargo of Oriental goods for its object. The ultimate fate of this expedition has never been disclosed, for after sailing through Gibraltar the vessels headed south along the western coast of Africa, passed Cape Nun ($28^{\circ} 47'$ north latitude) and disappeared. Efforts made a generation later to find trace of them proved abortive.

These two expeditions, it will be noticed, were conducted by Italians, or, more strictly speaking, by Genoese. From the time of these voyages until about 1340 knowledge of the Atlantic—and more was known about it than is generally supposed—was gathered chiefly by Italian explorers and geographers. We find, for example, in a book called the *Conoscimiento*, published about 1345, a mention of the Madeira Islands, and on the Laurentian Portolano, a map

that appeared six years later, we find the Azores also. Not only are these islands shown but they are depicted with considerable accuracy, a tolerable proof that they were well known, and judging from their names as they appear on this chart it would seem that they had been discovered by Italians. Probably these Italians were in the service of Portugal.¹⁸

With Henry the Navigator, Prince of Portugal, begins the serious work of finding the route around Africa. The close contact which the Portuguese, as well as the Spaniards, had with the Moors in Spain had familiarised them with Oriental life and stimulated a desire to enjoy the luxuries of the East; but unfortunately, the hostility existing between the Moors and Christians deprived the latter of Moorish goods. Trade with the Levant through Italian merchants would, of course, supply the Portuguese with the goods they desired, but this, as we have pointed out, was an expensive business. During his stay in Africa, where he had gone to capture Ceuta in 1415, the Prince learned from the Moors much concerning the interior of the continent and something about the coast of Guinea. He learned of caravans crossing the desert from Tunis to Timbuctoo and to Cantor on the Gambia, and this knowledge filled him with a desire to reach these countries by sea. Henry's motives in starting his expeditions down the coast of west Africa were various. Azurara, his biographer, attributes to him a wish to learn of the country beyond Cape Bojador, and to open communication with people living in this region; besides which Henry regarded the Moors as being more powerful on that side of Africa and wanted to obtain information about their strength. He also believed that there were a few scattered Christians along the African coast, and this, he thought, would give him a base for what was not the least of his objects,—namely, the spreading of the Faith.¹⁹ His principal purpose from our

point of view was the desire to discover a route to India, a desire whetted by a thirst for geographical knowledge, and by an ambition to build up a colonial empire by trade with the Far East.²⁰ Stationed at his residence at Sagres Henry worked on his schemes for a period of forty years. It is unnecessary to sketch the various expeditions in detail. Cape Bojador, long the limit of southern exploration, was rounded in 1434; and at the time of Henry's death, in 1460, the Cape Verde Islands had been discovered and vessels had passed Cape Verde itself. The eastward trend of the African coast at this point gave rise to premature hopes that the southern extremity of the continent had been found; but a realisation that the turning point was not in this latitude did not dampen the ardour of the explorers, for the movement was by now too well under way to be halted by a temporary check. Bartholomew Diaz rounded the Cape in 1486 and thus the route was laid open. Within a year of Diaz's expedition Covillan was dispatched to find the home of Prester John and the places "where the pepper and cinnamon grew, and other sorts of spicery, which were brought unto the city of Venice from the countries of the Moors." Covillan on his journey followed an entirely different route, going to Alexandria, then ascending the Nile and crossing to the Red Sea, where he embarked for India. Not satisfied with his attempts to reach the East in these two directions, the King of Portugal sent out a third expedition to try for the passage by way of Nova Zembla. It was, of course, unsuccessful.

With the discovery of the route to India by Vasco da Gama in 1498, Portuguese exploration, with the exception of the voyages of the Cortereals and a few others of minor consideration, came to an end. Thereafter the Portuguese contented themselves with sailing along the Asiatic coast from port to port and establishing trading posts in the

Spice Islands, intent only on commerce with no thought of geography. But a sea route to the East had been found, and cargoes of spice were brought back to Europe at a far lower cost than the Europeans, particularly those dwelling along the Atlantic seaboard, had been accustomed to pay for the goods they received through Venice. What Portugal had done, and what it was believed Spain would presently do, could be done by others, and since the route by the Cape of Good Hope was too long a distance for the more northerly European nations, these nations now undertook to obtain their share of Oriental trade by striking due west from their shores. The first move in this great undertaking was the expedition sent out by England under John Cabot.

CHAPTER I

EARLY ATTEMPTS OF THE ENGLISH, FRENCH AND PORTUGUESE

Henry VII's interest in a route to Asia.—Voyages of John Cabot.—English voyages to the new found lands.—Sebastian Cabot's putative voyage.—Expeditions under Henry VIII.—Robert Thorne, his effort to rouse interest in the discovery of a northwest passage.—John Rut's expedition.—Master Hore's voyage.—The Cortereals.—The Portuguese in the North Atlantic.—Spaniards search for a strait in the lower latitudes.—The French enter the field.—Verrazano's voyage.—Jacques Cartier explores the St. Lawrence.—Geographical knowledge of North America in the middle of the sixteenth century as shown on contemporary maps.

THE story of the quest begins with the voyages of John Cabot, who sailed under the flag of Henry VII of England. The object of these voyages, in the minds of both Cabot and his royal patron, was a purely commercial one, that is, their purpose, like that of Columbus, was to find a trade route to the Far East by sailing west, and so enable Englishmen to purchase Oriental goods at a lower price than they were obliged to pay when trading through the ordinary channels. By a fortunate coincidence the voyage of Columbus, which served as inspiration for Cabot, took place at a time when England was entering upon her career of commercial expansion under the wise guidance of her King; thus a golden opportunity was provided for Cabot to interest the sovereign in his project of discovery.

Henry was eager at this time to retrieve his kingdom from the depression into which it had fallen. The Wars of the Roses had decimated the ruling classes of England and brought the feudal system, which had been the basis of political and economic life during the Middle Ages, into a

state of rapid disintegration. At his accession Henry found that the bulk of the carrying trade was in the hands of foreigners who, in accordance with the general policy in vogue in England before the days of the Tudors, maintained elaborate establishments in the kingdom, where, for the sake of the low prices they were able to quote, they had been permitted to settle and enjoy a thriving trade. Hence the foreign element controlled the import and export business of the country.¹ It was Henry's aim to change these conditions and to build up a large trade, conducted by his own subjects, not only with neighbouring countries, but with those at a distance as well. The policy he inaugurated was the one known later as the Mercantile System, a system that aimed at the regulation of industry and commerce in such a way as to promote the general interests of the nation. To achieve this ambitious programme it was necessary to carry out proper measures for the accumulation of treasure, the encouragement of shipping, and the maintenance of a sufficient food supply, all of which would furnish employment for the working classes. The King greatly admired the Venetian commercial system by which the details of private business were regulated to promote the welfare of the Republic; and in a measure he sought to emulate the spirit of the Italian city, but he knew that he must act with moderation, for his subjects would not tolerate too drastic an interference with their business affairs. His efforts in this direction, therefore, manifested themselves in a series of measures to promote trade by governmental regulations and commercial treaties. In order to build up the decayed merchant fleet Henry limited the carrying of English goods to English, Irish and Welsh vessels manned by British seamen, thus inaugurating the policy that became so prominent through the Navigation Acts of the seventeenth century. He also encouraged the fishing industry by obtaining

privileges for English fishermen to carry on their occupation in Swedish and Norwegian waters. Favourable commercial relations were established with neighbouring powers, but besides this he was anxious to develop a trade with the East by which he could obtain the highly desired spices and Oriental goods for use at home. A treaty with Russia enabled him to procure, on favourable terms, the Eastern merchandise that reached the Baltic Sea from the Caspian trade route. English vessels were also dispatched to Sicily, Greece and Syria to fetch silks and spices directly to England. Henry in carrying out his commercial policies proved himself a merchant as well as a king, often trading on his own account as a private individual and frequently advancing money out of the Privy Purse for the equipment of maritime expeditions; and the large sums found in his exchequer were chiefly derived from the profits of these speculative enterprises.² It was this desire to open up direct communication with the East that induced the Merchant-King to lend a ready ear to the adventurous proposals of Cabot.

The age of English discovery had dawned by the time Henry ascended the throne, in fact even during the turbulent years that preceded his reign attempts had been made to explore the Atlantic in the hope of finding a land which, according to tradition, lay somewhere towards the setting sun. The city of Bristol, a famous centre of maritime enterprise during the fifteenth century, had been accustomed for many years to send out fishing vessels which plied their trade off the coast of Iceland. A Norwegian writer tells us that in the year 1419 twenty-five vessels were wrecked off the Icelandic coast; and who knows but that English fishermen may have been driven by adverse winds as far as the American shore and returned with no conception of the importance of their discovery, but only with the idea that they had landed on some barren island situated at a great distance

from their accustomed haunts? There is, indeed, a strong presumption that English and, as we shall see, Breton and Norman fishermen, in the course of their voyages on the Atlantic, may have fished off the banks of Newfoundland, and perhaps have landed on the coast to dry their fish, before the discovery of America. But besides their fishing ventures the men of Bristol were interested in exploration, and in 1480 dispatched one Thomas Lloyd to discover the legendary island of Brazil, said to be situated somewhere in the Atlantic.³ Lloyd's attempt was, of course, a failure, but the merchants, undaunted by this setback, sent out several other expeditions to continue the search for the mythical island. The Spanish ambassador, Pedro de Ayala, in writing to his sovereigns in 1498, informs them that "the people of Bristol have, for the last seven years, sent out every year two, three, or four light ships (caravelas), in search of the island of Brazil and the seven cities."⁴ Thus the enterprises of discovery, which the King was about to foster, met with a sympathetic reception from the men of Bristol, who for some time had been endeavouring, on their own responsibility, to unlock the mysteries of the Atlantic Ocean.

Henry VII's first opportunity to send out an expedition to find the western route to the Orient came shortly after his accession to the throne. At that time Columbus, who was attempting with indifferent success to obtain a hearing at the court of Spain for his plans to reach Cathay, sent his brother, Bartholomew, to England for the purpose of enlisting Henry's aid. Henry, unfortunately, was then busy with affairs which he deemed more pressing, and failed to see the importance of the scheme presented to him. He kept Bartholomew's plan in abeyance, putting off his decision until the Spanish sovereigns had closed with Columbus and sent him forth on his epoch-making voyage. Then, too late, Henry realised that his opportunity of securing the

services of the great Genoese navigator had vanished. But his failure to take advantage of Bartholomew's offer was not fatal to his schemes of discovery, for no sooner had the fame of Columbus's voyage spread abroad than opportunity knocked again at the royal door in the person of John Cabot. Perhaps Henry's procrastination in the first instance was instrumental in securing for Cabot a more favourable reception when he laid before the King his scheme for finding a direct route to Asia.

John Cabot, or, to give him his correct name, Zuan Caboto, was a native of Genoa. Early in life he moved to Venice, where, after the necessary residence of fifteen years, he became a naturalised citizen of the Republic. His ambition to find a route to Cathay was first roused when he visited Mecca and saw the caravans bringing their spices from the eastern countries. A fellow countryman to whom he confided his plans thus describes the impressions which influenced him: "He [Cabot] says that once upon a time he was at Mecca, whither the spices are brought by caravan from distant countries, and those who brought them, on being asked where the said spices grow, answered that they did not know, but that other caravans come with this merchandise to their homes from distant countries, who again say that they are brought to them from other remote regions. And he argues thus, that if the Orientals affirm to the southerners, that these things come from a distance, and so from hand to hand, presupposing the rotundity of the earth, it must be that the last people gets them in the north towards the west." ⁵ It was to the northwest, then, that Cabot would look for his passage to the East. His perusal of Marco Polo also added to his desire to visit the Orient, and his study of Toscanelli's map, a chart used by Columbus, gave him the key to the route. Eventually he removed to England with his wife and three sons and settled in Bristol.

The rumours of the island of Brazil then current in Bristol shipping circles, and the frequent expeditions sent out from that port to find it, presumably influenced Cabot and may have led him to believe that the coast of Asia was not far off. Cabot, it must be pointed out, was not seeking a northwest passage in the sense of a strait through an intervening barrier, for the discoveries of Columbus did not indicate the existence of land as far north as the latitude of England; in fact, many early maps show that his discoveries were regarded as a sort of archipelago off the coast of Asia. The voyages of Cabot, like the first voyage of Columbus, were launched for the purpose of reaching Asia, with no thought of an intervening continent. King Henry became interested in Cabot's plans, and, remembering what he had lost by his delay with Bartholomew Columbus, determined not to let this second opportunity slip through his fingers. A patent was granted to John Cabot and his three sons, Lewis, Sebastian and Sancius, on March 5, 1496. By this instrument the recipients were appointed governor and lieutenants of the King in such places as they might discover, with exemption from all custom duties on goods imported into England from the newly discovered lands; in return for which the King was to receive one-fifth of all the profits of the venture. The Cabots were permitted to navigate north or east or west, and to take possession of all territories not already held by Christian rulers.⁶

The Spanish rulers, becoming alarmed at the possibility of encroachment on their preserves, as well as on those of the King of Portugal, took the earliest opportunity to instruct their ambassador to bring pressure to bear on King Henry. "You write," said the Spanish sovereigns to their representative, de Puebla, "that a person like Columbus has come to England for the purpose of persuading the King to enter into an undertaking similar to that of the Indies,

without prejudice to Spain and Portugal. He is quite at liberty. But we believe that this undertaking was thrown in the way of the King of England by the King of France, with the premeditated intention of distracting him from his other business. Take care that the King of England be not deceived in this or in any other matter. The French will try as hard as they can to lead him into such undertakings, but they are very uncertain enterprises, and must not be gone into at present. Besides they cannot be executed without prejudice to us and to the King of Portugal.”⁷ But Henry was not to be turned from his purpose by such impartial advice, and Cabot sailed from Bristol on May 2, 1497, in the good ship *Matthew*. The exact place at which he reached the American coast cannot be definitely determined, for our knowledge of his cruise is extremely meagre. Henry Harrisse, who has made an exhaustive study of the subject, which it is not necessary for us to go into, places the landfall on the coast of Labrador somewhat north of the Strait of Belle Isle, a channel that separates Newfoundland from the mainland. After striking the coast at this point Cabot sailed north along the shore until he reached Cape Chidley at the entrance of Hudson Strait. Here he retraced his course to his landfall, and then continuing southward sailed along the eastern coast of Newfoundland to Cape Race, whence he returned to England.⁸

Landing in England, Cabot received an ovation from the people, who thronged in the great man's footsteps, while the King showed his appreciation for the explorer's services by a cash reward and the promise of a fleet of ships, with the pick of the local jails to man them, for his use the following year.⁹ Cabot's popularity was great. "His name," writes the Venetian Pasqualigo, in referring to the explorer, "is Zuan Cabot, and he is styled the great admiral. Vast honour is paid him; he dresses in silk, and these English run

after him like mad people, so that he can enlist as many of them as he pleases, and a number of our own [Italian] rogues besides." As Cabot made his voyage at a time when England was beginning to develop her industries and the minds of men were intent in this direction, his exploit did not receive from the intelligent classes the attention it deserved. Hence literature is silent about his discoveries for twenty years or more, and even then we must turn to other than English sources for our information regarding them.

Historians of exploration, during the early sixteenth century, were for the most part Spaniards and Italians, men who were not in touch with the followers of John Cabot; and such information as they obtained about Cabot's voyages came from John's son, Sebastian, who in 1512 settled in Spain. From all accounts this worthy scion appears to have brushed aside his father's exploits and enlarged upon his own. Fortunately there were at the time of John's voyages Italians residing in England who were greatly interested in their countryman's achievements and took occasion to write home such news regarding them as they had been able to collect. Shortly after Cabot's return, that is, in August, 1497, Pasqualigo, one of these Italian correspondents, a portion of whose letter we have already quoted, wrote to his brothers in Venice: "The Venetian, our countryman, who went with a ship from Bristol in quest of new islands, is returned, and says that 700 leagues hence he discovered land, the territory of the Grand Cham [of Cathay]. He coasted for 300 leagues and landed; saw no human beings, but he has brought hither to the King certain snares which had been set to catch game, and a needle for making nets; he also found some felled trees, wherefore he supposed there were inhabitants, and returned to his ship in alarm." At the same time Raimondo de Soncino, the Milanese ambassador, wrote to the Duke of Milan advising him of Cabot's dis-

covery. His letter does not contain so much information as that of Pasqualigo, but it brings the coast of America three hundred leagues nearer England.¹⁰

These two epistles, written within three weeks after Cabot's return, are the earliest notices we have of the new discovery. Soncino's information is meagre, so meagre in fact, that the writer felt obliged to send his sovereign a more detailed account. This he did on December 18: "Perhaps amidst so many occupations of your Excellency," he wrote, "it will not be unwelcome to learn how his Majesty here [Henry VII] has acquired a portion of Asia without a stroke of his sword. In this kingdom there is a lower class Venetian named Master Zoanne Caboto, of a fine mind, very expert in navigation, who, seeing that the most serene kings, first of Portugal, then of Spain, have occupied unknown islands, meditated the achievement of a similar acquisition for his Majesty aforesaid. . . . This master Zoanne has a drawing of the world on a map and also on a solid globe, which he has made, and shows the point he reached,¹¹ and going towards the east, he has passed considerably the country of the Tanais. And they say that the land is excellent and [the air] temperate, and they think that Brazil wood and silks grow there; and they affirm that the sea is covered with fish which are caught not merely with nets but with baskets, a stone being attached to make the basket sink in the water, and this I heard the said Master Zoanne relate. And said Englishmen, his companions, say that they will fetch so many fish that this kingdom will have no more need of Iceland, from which country there comes a very great store of which are called stock-fish. But Master Zoanne has set his mind on something greater; for he expects to go from that place already occupied, constantly hugging the shore, further towards the east until he is opposite an island called by him Cipango [Japan], situated

in the equinoctial region, where he thinks grow all the spices of the world and also the precious stones. . . . And it is said that in the spring his Majesty aforesaid will fit out some ships, and besides will give him all the malefactors, and they will proceed to that country to form a colony, by means of which they hope to establish a greater depot for spices in London than there is at Alexandria. And the chief men in the enterprise belong to Bristol, great sailors, who now that they know where they go, say that it is not more than a fifteen days' voyage thither, nor do they ever have storms after they leave Ireland. I have also talked with a Burgundian, a companion of Master Zoanne's, who confirms everything and wishes to return there because the Admiral (for thus Master Zoanne now styles himself) has given him an island; and he has given another to a barber of his from Genoese Castiglione, and both of them consider themselves counts, nor does my Lord the Admiral esteem himself less than a prince."¹²

Cabot, then, like Columbus, believed that he had discovered Asia and had won for his adopted countrymen the right to trade with the East, thus liberating them from the grasp of the European middlemen. In order to start the flow of silks, jewels and spices to England it was necessary then merely to found a colony beyond the sea, by means of which these precious wares could be relayed across the Atlantic from a continent distant but a fifteen days' voyage. For such a purpose there was no lack of enthusiasm, either among the merchants or at the Court, for besides the rich trade in Oriental goods there would also be a profitable business in fish, and the two together would serve to build up the merchant marine, always a valuable consideration with Henry. Though Cabot had made a tremendous impression on the imagination of the English people, Soncino regarded the entire affair with amused scepticism, judging

from the sarcastic undertone of his letter. Not that he doubted that Cabot had discovered land of some sort to the west, but he was not to be deluded by a proposal to establish a base for Oriental trade within a few hundred leagues of England.

Eager to strike while the iron was hot, Cabot now petitioned the King, and received from him on February 3, 1498, a new patent which granted him—his sons are not mentioned in the instrument—permission to take from whatsoever port he wished six English vessels of less than two hundred tons, for transporting adventurers to the islands discovered by him on his previous voyage. Cabot's schemes again caused some apprehension in Spain, where any discovery west of the Line of Demarcation, which separated the claims of Portugal from those of Spain, was regarded as trespass on Spanish possessions.¹³ But Henry paid no attention to the claims of the Spanish rulers for he fitted out, or at any rate permitted to be fitted out, an expedition on a much larger scale than the previous one. Instead of a single ship, a fleet of five vessels was prepared and victualled for a voyage of one year. The financial backing for the expedition was furnished by a group of Bristol and London merchants who ventured their goods on the chance of making a profit. Cabot's object on this his second voyage was not the discovery of a passage. He firmly believed that he had found the Asiatic coast, and he intended on this occasion to make a more thorough exploration of it. According to de Puebla, he expected to discover the mythical island of Brazil, and possibly some islands in the neighbourhood, which lands he estimated at not over four hundred leagues from England.¹⁴ Cabot's intention of establishing a colony somewhere on the shore of North America which could be used as a base of operations in the future and a place where the English could stop for supplies and repairs is evident,

judging from a letter we have which tells us that although the fleet carried a year's supplies, it was expected back in the month of September. The extra supplies were presumably intended for the colonists remaining in America.¹⁵

Cabot sailed in May, 1498. His exact course is unknown, but considering his objective he probably steered for his first landfall and then, since he was going in search of spices, coasted southward towards the tropics. According to Harris, he cruised along the coast as far as modern Florida, an assumption based on a map of *La Cosa* (1500), which shows by an inscription and by pictures of English flags that an expedition under King Henry must have explored the coast for some distance. The date of Cabot's return is shrouded in mystery. The British Customers Account, 1497-1499, shows that he received his pension of twenty pounds at Michaelmas, 1499, a proof that he had returned by this time at least. Shortly after this he died, leaving to his son, Sebastian, the inheritance of his geographical knowledge.

It must have been evident to the English by now that the land sighted by Cabot, while it might be the coast of Asia, was to all intents and purposes, a barrier across the route to Cathay, for as Cabot sailed down the coast vainly seeking some signs of Chinese civilisation, he found only what appeared to be a sparsely settled country. And the irony of it. A man had discovered an unknown continent for the English people, with untold wealth and resources, yet his achievement was regarded as little better than a failure. The continent instead of being a welcome addition to the kingdom reared itself as a barrier across the pathway to the East. To pierce this barrier, or to circumnavigate it, became the geographical problem of English statesmen and seamen until the colony of Virginia was established and was well on its way towards prosperity; and even after this, yes,

even after England had built up her great colonial empire in America, her sailors still attempted to solve the mystery by seeking the Northwest Passage.

Meanwhile Henry kept up his interest in western exploration. Undaunted by the protests of Spain, but with his enthusiasm somewhat dampened by the results of Cabot's second voyage, he continued to encourage explorers by trifling subsidies. The English kept in touch with the new found land, as the American coast was called. At the request of some Bristol merchants who felt a desire to try their fortunes in the western lands, the King granted a patent on March 19, 1501, to the adventurers Warde, Ashehurst, Thomas, and three individuals from the Azores who thereby became naturalised British subjects, embracing the privileges previously conceded to the Cabots. The charter specifically excluded foreigners from the new found lands unless they had received the permission of the patentees. The patentees were empowered to set up the King's standard in newly discovered countries, not already claimed by Christian princes, and to make laws for the proper government of the same. They were to enjoy a monopoly of trade during a period of ten years, and the captains and crews were to receive the benefit of certain exemptions from custom-house duties in bringing their goods into England. The document shows that the backers of the enterprise intended to found a permanent colony in America rather than engage in a trading expedition. The combination of British merchants and Portuguese subjects may be accounted for by the assumption that the former were to furnish the necessary capital while the latter were to supply the necessary knowledge of the western Atlantic, a subject on which they were better posted than their associates. Fernandes, one of the Portuguese patentees, was evidently familiar with navigation on the Atlantic as he had obtained

a charter from his king in 1499 to make discoveries in the northwest, and, judging from another charter issued to him nine years later, it is probable that he had made voyages in that direction.¹⁶

An expedition undoubtedly took place under the patent of 1501, for we find several entries in the Privy Purse giving evidence of a voyage to America. Under date of September 30, 1502, there is an item: "To the merchants of Bristol that have been in the Newfound land, £20;" and on September 26 another item granting pensions of ten pounds each per annum to Francisco Fernandes and João Gonsalves, "in consideration of the true service which they have done unto us [the King] to our singular pleasure as captain unto the new found land."

The charter under which this voyage was made was soon superseded by one issued December 9, 1502, which included among the patentees one Hugh Elliott, besides some of the persons mentioned in the document of the previous year. By this instrument the period of trade monopoly was extended from ten years to forty, and two shiploads instead of one might be imported free of customs duties. Expeditions to the new found land were unquestionably made under this patent, though we have no detailed information regarding them. Referring again to the Privy Purse records, we find disbursements made to persons who had recently gone to America. November, 1503, "to one that brought hawks from the Newfound Island, £1." April, 1504, "to a priest that goeth to the New Island, £2." August, 1505, "to Clays going to Richemount with wild oats and popinjays of the Newfound Island, for his costs, 13s. 4d." August, 1505, "to Portyngales [Portuguese] that brought popinjays and cats of the mountain with other stuff to the King's grace, £5."¹⁷

It is from such data as these, mere scrapings of his-

torical knowledge, that we get our only inkling of the enterprises which were launched under these two patents. What was the object of these expeditions? The charters mention specifically the granting of certain trade concessions, and this would indicate that the adventurers expected to obtain goods which could be brought to England for sale. The nature of this merchandise is open to speculation. Did the patentees expect to trade with China or to find suitable merchandise in the new found lands? Cabot on his return from his second voyage must surely have given his patrons a complete account of the extent of his exploration of the American coastline and of his failure to find any indication of the civilisation reported by Marco Polo and other Asiatic travellers. Moreover, the unsuccessful voyages undertaken by the Cortereals along the American coast at this time substantiated the conclusions of Cabot; and the results of their journeys were undoubtedly known to the patentees, among whom, as we have said, were several Portuguese, fellow subjects of the Cortereals. The adventurers, then, attacked the problem armed with a fair knowledge of the facts. It was probably their intention to establish stations of some sort on the shores of the new found lands, and to open trade with the natives, if there were any, or to collect suitable materials from the country. The territory on which they landed was, to the best of our knowledge, the coast of Labrador. Robert Thorne's map of 1527,¹⁸ the first world map executed by an Englishman, shows Labrador under the caption, *Nova terra laboratorum dicta ab Anglis primum inventa*, and it is evident from this that Labrador was the country claimed by the English and used as a trading base by them. The island of Newfoundland does not appear on Thorne's chart. Possibly, though not probably, the English forbore to land on it out of respect for the King of Portugal, whose territory it was presumed to be;

for this somewhat astounding claim was advanced in the belief that Newfoundland lay east of the Line of Demarcation and, therefore, came within the Portuguese sphere, as may be seen by a glance at Cantino's map of 1502.¹⁹

Trade on the barren coast of Labrador was doomed to failure. The country yielded lumber and tall, straight shafts of wood, but the demand for these was not so great at this time as it became in the seventeenth century when American colonists were expected to provide spars for the British navy. Wildcats and popinjays were not articles for which there was much demand in England, and the few exhibited there as samples elicited no further orders. The trading posts established in Labrador were regarded only as temporary stations, or, perhaps, as half-way ports for the revictualing of ships when commerce with Cathay had been established, for it was trade with the Far East that provided the driving power for all westward undertakings. As time went on and no communication was found with China, and the produce of Labrador proved meagre and unprofitable, the enterprise came to an end. We hear of no more of these voyages after 1505.

The career of Sebastian Cabot after the death of his father has been the subject of considerable interest and deserves more than a passing notice, for it is from Sebastian that we get the first inkling of the belief in a northwest passage. Sebastian went to Spain in 1512 and entered the service of Ferdinand as a naval captain with an annual salary of fifty thousand maravedis. Two years later the King summoned him to Court for the purpose of asking his advice regarding an expedition he was about to undertake, possibly with a view of searching for the Northwest Passage. This voyage, it appears, never took place. At this time, however, there was much speculation in Spain over the possibility of finding a passage through the barrier, for

by now the existence of land blocking the way to Cathay was clearly recognised. Peter Martyr, the historian, a warm personal friend of Cabot, published in 1516 a brief account he had obtained from him hinting at the existence of a passage. This is the first published account of a Cabot voyage, for previous to this the only recorded information of the Cabot expeditions is that contained in the letters of Soncino and his fellow countrymen. Strange to say, the narrative of Peter Martyr makes no mention of John Cabot but gives the entire credit to Sebastian, and this perversion of the truth is also found in several accounts written subsequently by different authors, though the *mappemonde* of 1544, accredited to Cabot, mentions John as the discoverer of the new found lands. According to Martyr the northern seas had been searched by Sebastian, who had equipped a fleet of vessels at his own expense and directed his course towards the North Pole. Cabot noticed during his journey certain phenomena which Martyr interprets as indicating the probability of a passage. "He sailed likewise in this tract," says Martyr, "so far towards the west, that he had the island of Cuba on his left hand, in manner in the same degree of longitude. As he travelled by the coasts of this great land, (which he named Baccalaos [Newfoundland]), he saith that he found the like course of the waters toward the west, but the same to run more softly and gently than the swift waters which the Spaniards found in their navigations southward. Wherefore it is not only more like to be true, but ought also of necessity to be concluded that between both the lands hitherto unknown, there should be certain great open places whereby the waters should thus continually pass from the east unto the west: which waters I suppose to be driven about the globe of the earth by the incessant moving and impulsion of the heavens, and not to be swallowed up and cast up again by the breath-

ing of Demogorgon, as some have imagined, because they see the seas by increase and decrease to ebb and flow.”²⁰

As later explorations disclosed the vastness of the land discovered by Cabot, and its formation as a barrier across the route to Cathay, others besides Martyr turned to Sebastian for information regarding a passage. Ramusio, the Italian historian of discovery, in his *Delle Navigazioni e Viaggi*, 1554, tells us that he met a stranger at Mantua who had obtained from Cabot an account of his attempt to find the passage. The stranger describes Cabot as a man of extraordinary influence at the Spanish Court in matters concerning navigation, “insomuch that for his ability he is preferred above all pilots that sail to the West Indies, who may not pass thither without his license, on which account he is denominated pilot-major or grand pilot.”²¹ Desirous of obtaining information, the stranger sought an interview and was rewarded with the following story: “‘When my father died,’ said Cabot, ‘in the time when news was brought that Don Christopher Colonus [Columbus], Genoese, had discovered the coasts of Indies, whereof was great talk in all the Court of King Henry VII, who then reigned, insomuch that all men, with great admiration, affirmed it to be a thing more divine than human, to sail by the west into the east, where spices grow, by a way that was never known before; by this fame and report there increased in my heart a great flame of desire to attempt some notable thing; and understanding by the sphere that, if I should sail by way of the northwest, I should, by a shorter track, come into India. I imparted my ideas to the King, who immediately commanded two caravels to be furnished with all things necessary for the voyage, being much pleased therewith. This happened in 1496, in the early part of the summer, and I began to sail towards the northwest, with the idea that the first land I should make would be Cathay,

from which I intended afterwards to direct my course to the Indies; but, after the lapse of several days, having discovered it, I found that the coast ran towards the north, to my great disappointment. From thence, sailing along it to ascertain if I could find any gulf to run into, I could discover none; and thus, having proceeded as far as 56° under the pole, and seeing that here the coast trended towards the east, I despaired of discovering any passage, and after this turned back to examine the same coast in its direction towards the equinoctial, always with the same object of finding a passage to the Indies, and thus I reached the country at present named Florida, where, since my provisions began to fail me, I took the resolution of returning to England.' ”

This narrative is by no means an accurate one. Of the several accounts of Cabot's voyage, among which are Lopes de Gomara's *Historia General de las Indias*, 1544, and Antonio Galvano's *Discoveries of the World*, 1563, it forms the one discordant note in the comparative harmony of the group. This is easily accounted for by the fact that it is really a second-hand report of what Cabot said, compiled from memory after the lapse of many years. Ramusio, however, again mentions the subject in the preface of his third volume, saying, this time on the direct evidence of Cabot himself that he (Cabot) found open water as far north as 67° , where he believed he would have discovered the route to Cathay if his crew had not mutinied and forced him back.

This voyage, to which we find a number of allusions in the writings of sixteenth century authors, has given rise to much speculation. The date given by Ramusio as 1496 might, of course, be an error for 1497 or 1498. From this it would appear that Cabot was relating one of the voyages undertaken by his father (and on which Sebastian may

very well have gone), but that he placed himself in command in order to get the credit of having made an important discovery. A very careful study of the documents relating to this expedition has been made by J. A. Williamson, who concludes that Sebastian made a voyage—the third for the family—in 1499 or 1500, that is, after his father's death. This voyage, according to Mr. Williamson, was the first attempt made by the English to discover the Northwest Passage, the enterprises of John Cabot being directed to the coast of Asia. After analysing the various accounts of Sebastian's voyage written by different authors at different times, he shows that there are more points of resemblance between these stories than there are points of difference, and that the facts they have in common are more important than those on which they differ. The number of ships in the fleet, the number of men composing their crews, and the direction in which the vessels sailed are the same, or substantially the same, in all the narratives; while the principal differences are found in statements involving figures, such as the date of the voyage and the latitudes of the farthest north and the farthest south, points on which inaccuracies might easily occur. The voyage described in these accounts, says Mr. Williamson, should not be confused with those of 1497 and 1498, for John, and not Sebastian, Cabot commanded them. The correct date for Sebastian's journey is probably 1499 or 1500, for, as we have seen, King Henry in the charter he issued in 1501 denied to foreigners—and the Cabots were foreigners—the privilege of going to the new found lands without permission of the patentees,²² hence Sebastian's journey must have taken place—unless the entire affair is a fabrication—after the return of John's second expedition and before the patent of 1501 was issued. In corroboration of this conclusion we find an entry in the *Calendars of Bristol* for 1499 stating that in

this year Sebastian Cabot offered his services to the King for making discoveries, but meeting with an unfavourable reception he set forth on his own responsibility.²³

The problem is a difficult one and cannot be solved from the material now at hand. Various scholars have interpreted the accounts of Martyr, Ramusio and the others as referring to a journey Cabot is said to have made at a much later time, but until further records are unearthed Mr. Williamson's interpretation should be tentatively accepted. For our purpose it is sufficient to show that Sebastian Cabot, whose life spans a good part of the sixteenth century, was the first to place before the world, by his intercourse with geographers and historians—the letters of Soncino and his fellows were meant for private consumption only—the information acquired by his father and himself on the voyages they had made to the westward. This information suggests a passage to Cathay, and was used as evidence to show the probability of such a route by those who sought to find it. Did Cabot at the time he made his voyage set out with the deliberate intention of seeking a passage through the American barrier? To answer this we must remember that although the belief that the land discovered beyond the West Indies formed a separate continent from Asia, originated, according to Harisse,²⁴ at the very beginning of the sixteenth century, and possibly even earlier, one cannot assert categorically that Sebastian held this opinion when he made his voyage in 1499 or 1500. John Cabot's second journey disclosed, it is true, an unbroken coastline extending for a great distance north and south, and he had sailed along it without finding a trace of anything resembling the Cathay of Marco Polo, but Sebastian might well have believed this to be the Asiatic Continent on which the provinces he sought might be found by more careful exploration, perhaps in some regions overlooked by his father. After his return from the ex-

pedition, especially after he had been able to compare his own observations with the opinions of the geographers in Spain and Portugal, he no doubt saw clearly that the land sighted by him was a new continent, hence he would be inclined, when discussing his experience, to interpret certain facts which he observed as indicating the possibility of a passage. The *mappemonde* of 1544, generally ascribed to him, though some authorities hesitate to credit him with the authorship, does, it is true, unite North America with Asia, but this map was designed at a period when belief in the continuity of the two continents eclipsed for a while the more nearly correct conception of the early sixteenth century.

The reign of Henry VIII (1509-1547) is not an outstanding one in the field of exploration. The King himself was deeply interested in the organisation of a royal navy, but more for military purposes than for the extension of his empire overseas. His continental policy, especially his attempt to assert his claims to the French throne, was, however, denounced by some statesmen who saw the folly of endeavouring to enrich England by wars with neighbouring powers, when the same result could be accomplished by trade with the rich lands that had so recently been discovered in the Far East. Lord Herbert, who was of this opinion, expressed himself strongly on the subject. "Let us, therefore, in God's name," he said, "leave off our attempts against the terra firma, as the natural situation of [the British] islands seems not to suit with conquests of that kind.—Or, when we would enlarge ourselves, let it be that way we can, and to which, it seems, the eternal providence has destined us, which is by sea.—The Indies are discovered, and vast treasure brought from thence every day; let us therefore bend our endeavours thitherwards; and if the Spaniards or Portuguese suffer us not to join with them, there will be yet

region enough for all to enjoy.”²⁵ This sentiment found no favour with the King. Thomas Wolsey, who held office under Henry from 1514 to 1528 and had other ideas of state policy, aimed at building up England by means of victorious wars and advantageous marriages; hence, until his term of office ended, we find no authentic record of voyages for a northwest passage.

Historians, however, at one time believed that a voyage for the passage was made in 1516 or 1517 by a naval officer named Thomas Spert, accompanied by Sebastian Cabot; and this voyage was considered by many to be the one referred to by Ramusio and his contemporaries. Richard Eden in the dedication to his *Treatyse of the Newe India*, 1553, speaks thus of the incident: ‘Our sovereign Lord of noble memory King Henry the VIII about the same year of his reign,²⁶ furnished and sent forth certain ships under the governance of Sebastian Cabot yet living, and one Sir Thomas Perte [Spert], whose faint heart was the cause that that voyage took none effect, if (I say) such manly courage whereof we have spoken, had not at that time been wanting, it might happily have come to pass, that that rich treasury called Perularia (which is now in the city of Seville, and so named, for that in it is kept the infinite riches brought thither from the new found land of Peru), might long since have been in the tower of London, to the King’s great honour and wealth of this his realm.” Unfortunately for this story Spert was master of the royal ship, *Henry Grace-à-Dieu*, from 1515 to 1521, and records have been found showing that he did not absent himself long enough from his post to make a voyage for the Northwest Passage. Furthermore, there are no official records of such a voyage made by Cabot, even if Spert did not accompany him.²⁷

Yet the King showed some interest in his nominal overseas possessions by instigating a trading expedition to

America in the year 1521, though there is no suggestion that he contemplated a voyage of discovery. Henry's plan was to collect a fleet of five ships to be manned and equipped by a group of merchant adventurers, and to send it to the new found land. The matter was broached to the Drapers Company of London, who after giving it due consideration determined that the enterprise involved too much risk; sickness, death, storms and other perils of the deep being suggested as reasons for declining to take part in the venture. The King had named Sebastian Cabot as the leader of the expedition, but the opinion which the Drapers had of his seamanship and knowledge of the new found lands was not such as to inspire confidence. "And we think," they said, "it were too sore adventure to jeopard five ships with men and goods unto the said island upon the singular trust of one man called as we understand Sebastian, which Sebastian as we hear say was never in that land himself, all if he makes report of many things as he hath heard his father and other men speak in times past."²⁸ A half-hearted attempt was made to meet the King's wishes and some subscriptions were collected, but as Henry was determined to do the job on a grand scale or not at all, the matter was eventually dropped.

At this time there came into prominence a man who may be regarded as the first of that distinguished line of Englishmen who interested themselves in the route to Asia by a northern passage, and who devoted their time to spurring on laggard officialdom by means of maps, books and letters, and often organised expeditions, largely at their own expense. Robert Thorne was the son of Robert Thorne, senior, a prominent Bristol merchant who accompanied Hugh Elliott on a voyage to America about 1502. The younger Thorne was born in 1492. With his brother, Nicholas, he carried on a trading business with the various ports of Andalusia. His affairs took him to Seville, where

he resided for several years, and in partnership with his brother established business connections with the Canaries and the West Indies, sending goods between these places and England by way of Spain. Thomas Tison, an Englishman, acted as his secret factor in the West Indies, and is said to be the first Englishman to live in these islands. Thorne is also reported to have had agents in the Spanish fleet. Because of his interest in geography Thorne picked up an acquaintance with Sebastian Cabot, who at this time was at the zenith of his career in Spain, and held a seat in that distinguished gathering at Badajos (1524), which was called together for the purpose of settling the respective claims of Spain and Portugal to the Molucca Islands. Thorne was highly esteemed by the Spaniards, and his wide acquaintance in influential circles enabled him to secure charts of the newly discovered lands, as well as geographical information pertaining to them. Like the loyal Englishman that he was, he was anxious to see his King spread the influence of England beyond the seas, and to emulate the example of Spain and Portugal in the field of discovery. For this reason he addressed a letter to Henry in 1527, urging him to adopt such a course. The King, he writes, may enrich his realm at small expense and with little effort by sending out expeditions to explore the new continent. He urges particularly that exploration be extended to the north, for, as he naïvely explains, three parts of the world are already discovered and there remains but a fourth part, that to the north, open to the English King. Moreover, exploration in this part of the world would not be difficult since one could take advantage of the continual daylight that is found in the northern latitudes during the summer months. There is danger, however, at a place two or three leagues from the Pole, but when once past this point it is clear "that from thenceforth the seas and lands are as tem-

perate as in these parts [Europe], and that then it may be at the will and pleasure of the mariners, to choose whether they will sail by the coasts, that be cold, temperate or hot. For they being past the Pole, it is plain, they may decline to what part they list.”²⁹ He then proceeds to show how a ship after crossing the Pole may go to India, China and the Spice Islands, and return by the Strait of Magellan. The quaint idea of a climate at the Pole, warmer than the Arctic regions already visited, and a navigable Polar Sea across which one might sail to China, lingered long after Thorne’s time, and will be found cropping out again to befuddle the minds of the Elizabethan seamen. In addition to the letter just quoted Thorne embodied his views in a pamphlet, known as Robert Thorne’s Book (1527), which he addressed to Dr. Ley, Henry’s ambassador to Charles V. From this book we learn that Thorne cast envious glances at the wealth brought in from the Spice Islands, and was anxious to have England obtain her share. Together with a friend he took a venture in Cabot’s expedition of 1526, a voyage that was intended to sail through to the Pacific by the Strait of Magellan, but actually got no farther than the Rio de la Plata in South America, for the purpose of sending two Englishmen in the fleet to pick up information, “and especially to know what navigation they have for those islands [Spice] northwards, and northeastward. For,” he argues, “if from the said islands the sea did extend, without interposition of land, to sail from the north point to northeast point one thousand seven hundred or one thousand eight hundred leagues, they should come to the new found islands that we discovered, and so we should be nearer to the said spicery by almost two thousand leagues than the Emperor, or King of Portugal are.”³⁰ To put the problem in plain English, Thorne dreamed of the Pacific Ocean, or, as he would have

said, the South Sea, extending in a northeasterly direction from the Spice Islands or East Indies for a distance of seventeen or eighteen hundred leagues to the new found lands of America, and this would enable the English to reach the Spice Islands by a much shorter route than the Portuguese were obliged to take by the Cape of Good Hope, or the Spaniards by the Strait of Magellan.

Thorne's work is of great importance. His object appears in the main to have been a patriotic and unselfish one, namely the enrichment of his country by a trade which he believed would put it on a parity with Portugal and perhaps with Spain. The many advantages derived by the Iberian kingdoms from Oriental commerce are set forth by him as an incentive to rouse the ambition of the British King; and the comparative nearness of the Spice Islands to England, by the route which Thorne believed could be found, is urged as a reason why Henry should make an attempt to find it. Thorne accompanied his book with a map, and in describing it he devotes considerable space to mathematical calculations intended to prove his point. He is also positive in his assertions of the warmth and mildness of the climate on the northern route, and in this belief he is led on, not so much by optimism, as by a hint from his father, who many years before had undertaken a journey to the new found lands. He closes his dissertation by requesting Dr. Ley to keep the map from the Spanish officials, as the government was jealous of the spread of geographical information and might cause the author some annoyance. To Thorne may be given the credit of being one of the first Englishmen to urge the discovery of the Northwest Passage on his government, for at the time he wrote his treatise the coast of North America had been fairly well covered by the French and Spaniards, and its nature as a barrier to the South Sea was

well established. He should also be credited with the curious distinction of being the first to suggest reaching the East by sailing over the North Pole.

The year in which Thorne's book made its appearance witnessed an attempt on the part of the English to find a way to Cathay, though there is no evidence of its having been instigated by Thorne. Probably it was not, for the expedition sailed too early in the year to have been planned and made ready after the book appeared. The King dispatched two vessels under one John Rut in May, 1527, and from the following entry in Grafton's *Chronicle* we get an inkling of their general destination: "This same month the King sent two fair ships, well manned and victualled, having in them divers cunning men, to seek strange regions; and so forth they set out of the Thames the 20th day of May; if they sped you well you shall hear at their return." From the harbour of St. Johns, Newfoundland, Master Rut wrote the King (Aug. 3, 1527) a synopsis of his travels. The *Mary Gilford*, for such was the vessel's name, and the *Samson*, her consort, sailed northward until they came to 53°, and there they found deep water and many great islands of ice. "Then," says Rut, "we cast about to the southward, and within four days after we had one hundred and sixty fathom [depth], and then we came into 52 degrees and fell [in] with the mainland, and within ten leagues of the mainland we met with a great island of ice, and came hard by her, for it was standing in deep water, and so went in with Cape de Bas, a good harbour, and many small islands, and a great fresh river going up far into the mainland [Alexis River?], and the mainland [was] all wilderness and mountains and woods, and no natural ground but all moss, and no inhabitation nor no people in these parts; and in the woods we found footing of divers great beasts, but we saw none not in ten leagues."⁸¹ Soon the *Samson* foundered in

a storm, leaving the *Mary Gilford* to make her way into St. Johns, where she found a fleet of French and Portuguese fishing vessels. From this port Rut sailed southward to the West Indies. There at the island of Mona, between San Domingo and Porto Rico, the ship was boarded by Spanish officials who were anxious to learn the nationality and destination of the stranger. A report by Gines Navarro, who interviewed the crew, discloses the purpose of the voyage. "On reaching them," says the account of Navarro's investigation, "he inquired from what country they came. They answered they were Englishmen from the city of London, and that the vessel belonged to the King of England. He asked them what they had come to look for in those parts. They told him the King had fitted out that vessel and another to go and discover the land of the Great Khan, but that on the way they met with a storm, during which they lost sight of their consort, and had never seen her again."³² A few days later the *Mary Gilford* arrived at San Domingo, where the licentiate, upon making fresh inquiries, received substantially the same information. This news, as might be expected, caused a great sensation in the island, as the inhabitants regarded the possibilities of the English monopolising a route to the Far East with feelings of alarm. We can find no further trace of the *Mary Gilford*; it is not known whether or not she returned to England; but probably she did, for the absence of any records indicating anxiety as to her whereabouts is presumptive evidence that the expedition returned safely and reported a failure.

Nine years later there took place a fiasco which we find related in the pages of Hakluyt. "One Master Hore of London," he says, "a man of goodly stature and of great courage, and given to the study of cosmography, in the 28 year of King Henry the 8 and in the year of our Lord 1536

encouraged divers gentlemen and others, being assisted by the King's favour and good countenance, to accompany him in a voyage of discovery upon the northwest [northeast] parts of America: wherein his persuasions took such effect, that within a short space many gentlemen of the Inns of Court, and of the Chancery, and divers others of good worship, desirous to see the strange things of the world, very willingly entered into the action with him." Hakluyt obtained his information from Thomas Butts and Oliver Daubeney, two of the adventurers who had returned sadder but wiser from their attempt to solve the mystery of the passage. According to these men, Hore's company sailed from Gravesend in April with two ships, the *Trinity* and the *Minion*. They steered a course for Cape Breton and from there went to Newfoundland, where they landed to replenish their larder. Food was scarce, and soon the crew were on the verge of starvation. Having exhausted all means of obtaining provisions, and with death staring them in the face, the "gentlemen and others" were about to draw lots to see which one should die to furnish food for the rest, when a French vessel entered the bay and anchored near them. Whether the French proved uncharitable or not the record does not say, and it is not likely that the English stopped to inquire, for without further ado they seized the ship as well as its stores and sailed for England. The French followed as best they could in the vessel abandoned by the Englishmen for the purpose of laying a complaint of piracy before the British King and demanding punishment for the robbers. But Henry magnanimously forbore to punish his subjects for a crime committed in self-preservation, and with true royal generosity he reimbursed the disconsolate Frenchmen for their loss. Though the object of this voyage was not to seek the Northwest Passage but merely, as Hakluyt says, to undertake discovery in northern

America, the expedition deserves mention in a chronicle of exploration for the sake of showing the interest felt in America at this time; but as the voyage was, after all, a bungling performance when compared to other expeditions undertaken for a similar purpose, it no doubt discouraged exploration for some time to come.

Before closing the reign of Henry VIII it is well to mention a last attempt, or rather the proposal for a last attempt since nothing ever came of it, to discover a northern passage. In a letter written May 26, 1541, to the Queen of Hungary by Eustace Chapuys, Charles V's ambassador to Henry, we find the following data: "About two months ago there was a deliberation in the Privy Council as to the expediency of sending two ships to the northern seas for the purpose of discovering a passage between Iceland and Greenland for the northern regions, where it was thought that, owing to the extreme cold, English woollen cloths would be very acceptable and sell for a good price. To this end the King has retained here for some time a pilot from Seville well versed in affairs of the sea, though in the end the undertaking has been abandoned, all owing to the King not choosing to agree to the pilot's terms, so that for the present, at least, the city of Antwerp is sure of not losing the commerce of woollen cloth of English manufacture."³³ The somewhat grotesque idea of looking to northern America for a market for woollen manufactures was due to a tariff war between England and the Low Countries. Henry had imposed a double duty on goods purchased by the Netherlanders in England, and he threatened further measures if some English vessels on which an embargo had been placed were not released. Fear of retaliation on British manufactures was the cause, according to Chapuys, of the proposed effort to seek an outlet for them in the northern countries.

After the death of Henry there was a decided pause

in the work of exploration. The brief reign of Edward VI yielded no efforts in the field of discovery to the northwest, while under his successor, Mary, Spanish Philip saw to it that the government of his consort made no attempt to infringe upon his claims to the Western Hemisphere. Such explorations as took place were directed to the Northeast Passage around Asia. The great awakening came under Elizabeth, but before taking up the exploits of her sailors, Frobisher, Davis and others, we must turn to continental Europe and examine the contributions of France, Spain and Portugal to the solution of the problem. This brings us to the early voyages of these nations along the Atlantic seaboard, which served to confirm the impression that the land to the westward was a solid barrier and not a group of islands offering an easy access to the South Sea. The work done by these men saved the English the unnecessary labour of searching here and there along the coast for an opening when they again attacked the problem, and led them to confine their efforts to the hitherto unknown northern regions.

Soon after the voyages of Columbus men began to realise that the lands discovered in the Western Hemisphere by the Spaniards were not entirely insular, but with the exception of the West Indies were connected together in some manner or other. Cabot's second voyage showed fairly conclusively that navigators must expect to encounter a continuous body of land extending from the Arctic regions to the coast of Florida, but it was some time before the results of his voyage were generally known to the world. Meanwhile the Portuguese were following in Cabot's trail. They had secured by the Line of Demarcation a clear title to lands in the Eastern Hemisphere, but the route to the East around the African Continent was long and tedious, and it might be possible, so they reasoned, to find a shorter way by endeavouring to duplicate the effort of Columbus in sailing west-

ward, but on a more northerly course. The vast distance separating Asia from America was, of course, unknown before Magellan's voyage across the Pacific (1519-1522).

The first of a series of expeditions undertaken in behalf of Portugal took place in the year 1500 under the command of Gaspar Cortereal, a man who had already served his apprenticeship in maritime exploration. King Emmanuel, who had dispatched Vasco da Gama around the Cape, was also interested in reaching his newly acquired possessions by a shorter route, and for this purpose he issued letters patent to Cortereal on May 12, 1500. Little is known of Cortereal's first expedition. It consisted of two ships and sailed in the summer of 1500, either from Lisbon or from the island of Terceira in the Azore Archipelago. Ramusio gives a hint that throws some light on the extent and purpose of the voyage. "In that part of the New World," he says, "that runs towards the north wind and northwest wind, opposite the habitable part of Europe, where many captains have sailed, the first (so far as is known) was Gaspar Cortereal, Portuguese, who in 1500 went there with two caravels, thinking to find some strait of the sea through which, by a shorter voyage that would not go about Africa, he could pass to the Spice Isles. He sailed so far up that he came to a place where there was the greatest cold and in 60° latitude he found a river filled with snow to which he gave a name, calling it the Rio Nevado, he did not have the courage to go farther ahead." Harrissee believes that Cortereal reached the North American coast between 49° and 55°, and that he may have entered Notre Dame Bay in Newfoundland.

The following year Cortereal made a second attempt in collaboration with his brother, Miguel. The brothers with a fleet composed of three vessels headed for the southern part of Greenland, and on reaching there turned southwest

for Newfoundland. Here Gaspar sent back two of his caravels under his brother and with his own ship started northward along the coast of Labrador in fulfilment of a boast he had made that he would go on until he had ascertained whether the land was an island or terra firma. Cortereal perished in his attempt, and his farthest north is a matter of conjecture. Harrisse is inclined to believe that he reached the entrance of Hudson Bay. Miguel, returning safely from the voyage, loyally resolved to go back in search of his brother. The following year, 1502, he received a patent from the King and valiantly sailed from Lisbon on the tenth of May. But nothing further was ever heard of him, and it is presumed that he perished somewhere off the coast of Newfoundland.

Though the Cortereal brothers had failed in their primary object of finding a passage they had established a claim for their sovereign to Newfoundland, a claim that was reinforced by the belief that the island lay east of the Line of Demarcation. As evidence of this we see on Cantino's map (1502) a large island in the proper place for Newfoundland (we are speaking approximately, of course), with the inscription: *Terra del Rey de Portugall*. The rights of the Portuguese Crown were respected in a general way by the English, as we have seen, in the patent of 1501; and as neither power used the island for other purposes than establishing fishing stations, activities which were also shared by the Normans and Bretons, amicable relations between the governments were easily maintained.

The death of the Cortereals did not deter their countrymen from following their trails to the north. A company was presently formed in the harbours of Vianna, Aveiro and Terceira for the purpose of founding a colony in Newfoundland that would be a base for the fishing industry. Likewise a thriving fishing business was built up on the Grand

Banks very soon after the visits of the Cortereals, for in 1506 a tax was levied by the Portuguese government on codfish brought from Newfoundland. The privileges of the Cortereals were kept alive by confirmations granted by the Crown from time to time. An attempt was made to colonise Nova Scotia by a Portuguese named Fagundes, who in 1521 is said to have explored the Gulf of St. Lawrence in anticipation of Cartier, and in 1567 Manoel Cortereal tried to establish a fishing settlement in Newfoundland. But the Portuguese showed no interest in the work of exploration. Their route by the Cape of Good Hope sufficed for purposes of trade with the East, while the Grand Banks supplied them with fish; and they were probably satisfied that a northwest passage, if one could be found, would prove more difficult to navigate than the route which they already monopolised.

While the Portuguese and English sought a route in the northern regions the Spaniards were skirting the southern shore of North America in the hope of finding a short cut to the East. Balboa's discovery of the Pacific in 1513 would seem to have confirmed the belief that the newly discovered lands formed a continent entirely separate from Asia. Yet geographers did not at first grasp the true significance of this mighty body of water, for twelve years later came the recrudescence of the idea that North America was but an eastern projection of Asia. Even the voyage of Magellan did not prevent this error from creeping in, for his was a southerly course across the Pacific and disclosed nothing of the vast sweep of water between Asia and North America. The Pacific, then, was regarded by such geographers as held to this erroneous theory as a South Sea washing the southern shore of their imaginary continental formation. The Spaniards, however, performed the greater part of their work of looking for a strait before this theory became generally

known. Belief in the possibility of finding such a strait somewhere in the Gulf of Mexico, or even on the eastern shore of Florida, was widespread in Spanish circles and roused considerable interest. As an incentive for attempting such a discovery, besides the desire for geographical knowledge for its own sake—in fact, such knowledge was of minor importance—the Spaniards were actuated by a jealousy of Portuguese commerce with the Far East, especially before the wealth of Peru and Mexico was known and fully appreciated. Alonzo de Zuazo, governor of the West Indies, in deploring the acquisitions of Portugal, made the following suggestion to Charles V: “That your Majesty may not mourn over this, as did Alexander to call himself master of other worlds, you must first order the division [according to the Line of Demarcation] to be made; and secondly fit out two small fast sailing vessels to examine it [the coast] all (meanwhile the strait which I have heard of in Tierra Firme may be verified, and Diego Alvitez, recently from there, has said it was so), and they can sail along the coast to the south, or reach that which comes from the north as Vasco Nuñez [Balboa] has been doing.”³⁴

Expeditions were immediately undertaken that disclosed the nature of the eastern coastline and showed beyond peradventure the absence of any strait. Ponce de Leon in 1513 explored the eastern coast of Florida as far north as 32°, which brought him to the neighbourhood of Savannah. Six years later de Garay, the governor of Jamaica, sent out Alonzo de Piñeda to search the Gulf of Mexico for a strait. Piñeda started for Florida. His course is not an easy one to follow, but we know at least that he thoroughly explored the coast of the Gulf of Mexico, thus proving the absence of a strait in this locality. Whether he cruised along the coast from Florida to Mexico, or vice versa, is a question difficult to determine, and one which fortunately does not

concern us. The eastern coast of Florida was further explored by Lucas Vasquez de Ayllon, an auditor of San Domingo, who dispatched an expedition in 1520. Gordillo, the commanding officer, pushed his way northward to $33^{\circ} 30'$ the following year. His efforts, however, did not satisfy Ayllon, for two years later the latter obtained a *cedula* from the government permitting him to explore the coast for a distance of eight hundred leagues and ordering him to bring back news of a strait if one were found. Ayllon in 1525 dispatched an expedition under Pedro de Quexos, who took nominal possession of the country for a distance of two hundred and fifty leagues, and the following year he went in person to push his discoveries, taking with him six hundred persons for the purpose of establishing a colony. He penetrated, so it is believed by some, as far north as Chesapeake Bay, but his well-laid plans came to naught as he died shortly after founding his colony.

The Congress of Badajos, which assembled in 1524 to discuss, among other things, the extent of current geographical knowledge, found in their survey of the North American Continent a certain gap in the coastline, roughly between $33^{\circ} 30'$, the northernmost point reached by Gordillo, and 43° , the southern limit of exploration by French fishermen. Between these two points there might be a strait. Magellan, it is true, had by this time discovered the passage that bears his name, and his vessel had returned with news of the discovery. But as the route around the South American Continent was felt to be too long, it was highly desirous to find a shorter one farther north. It so happened that the year prior to this Congress Charles V made an agreement with one Estevan Gomez—a man of no very great trustworthiness, since he had deserted Magellan at the strait—by which he promised to furnish him, for purposes of exploration, with a vessel and supplies for one year at a cost of fifteen hun-

dred ducats. The Emperor in setting forth the object of the enterprise, said: "Forasmuch as you, Estevan Gomez, our pilot, in order to serve us . . . offer to go and discover Eastern Cathay, of which you have notice and information, where you hope to discover as far as our Molucca Islands, which all falls and lies within our limits and sphere of influence; and seeing that along this said route to Eastern Cathay there are many islands and provinces hitherto undiscovered, very rich in gold, silver, spices and drugs, I accepted under the following conditions and terms."⁸⁵

Among the conditions and terms may be noted an express prohibition against encroaching on the possessions of the King of Portugal. No specific data of the expedition, which sailed in 1525, have been preserved, but it is generally believed that Gomez went no farther northward than the coast of Maine. Peter Martyr tells us that Gomez was sent to find a passage between Florida and Baccalaos (Newfoundland).⁸⁶ It is probable that he sailed along the North American coast as far as New England, where, finding no passage, and coming to the vicinity of French fishermen, he deemed it advisable to abandon the undertaking. Nevertheless, his belief in a strait was not dampened by failure. He was convinced of its existence in the neighbourhood of Labrador, but he also felt that the intense cold of this region would render it worthless, even if it could be found.

The French were among the earliest visitors to Newfoundland and the Grand Banks. The cities of Normandy and Brittany were by their very location the harbours and homes of a race of fishermen who gained a livelihood by supplying fish to the inland population. The numerous fast days of the Church made this a lucrative business, and as it was a business which took its votaries to sea it was but natural that they should be the first to make their way to the northeastern coast of America. The inhabitants of such

cities as Dieppe, Honfleur, St. Malo and Brest, were active in maritime enterprises before the days of Columbus, and some historians believe them to have been engaged in trade with the coast of Guinea during the fourteenth century. The first appearance of the French off Newfoundland is given by Mercator on his *mappemonde* of 1569, on which one may find the inscription: "In the year 1504 the first Bretons came to the shores of New France about the harbours of the Gulf of St. Lawrence." Unfortunately the records of these voyages have not come down to us. It is doubtful if the fishermen themselves kept logbooks, nor is it likely that they wrote memoirs of their voyages when they returned home. There were men in Brittany, men like the Angos of Dieppe and some of their captains, who were interested in geography and who might well have questioned these fishermen, but the archives of Dieppe were destroyed by bombardment in 1694 and those of La Rochelle met a similar fate, so that these reports, if there were any, have been lost. We have, then, records of the Portuguese, French and English fishing off the Grand Banks in the first decade of the sixteenth century. How early they may have gone there it is impossible to say. Mercator states that the first Breton fishermen appeared in these waters in 1504, but this may refer only to those of whom he had authentic knowledge and need not be construed as meaning that none were present there before this date.

French exploration during its earliest stages was undertaken by private enterprise, for the government kept aloof, being, it would seem, indifferent to the results, or, perhaps, too busy with other affairs. The Gulf of St. Lawrence, to which this nation first directed its attention, was known to its sailors before the days of Cartier. Even before the exploration of Fagundes Jean Denys of Honfleur, in 1506, cruised along its shores, and is said to have made a chart of

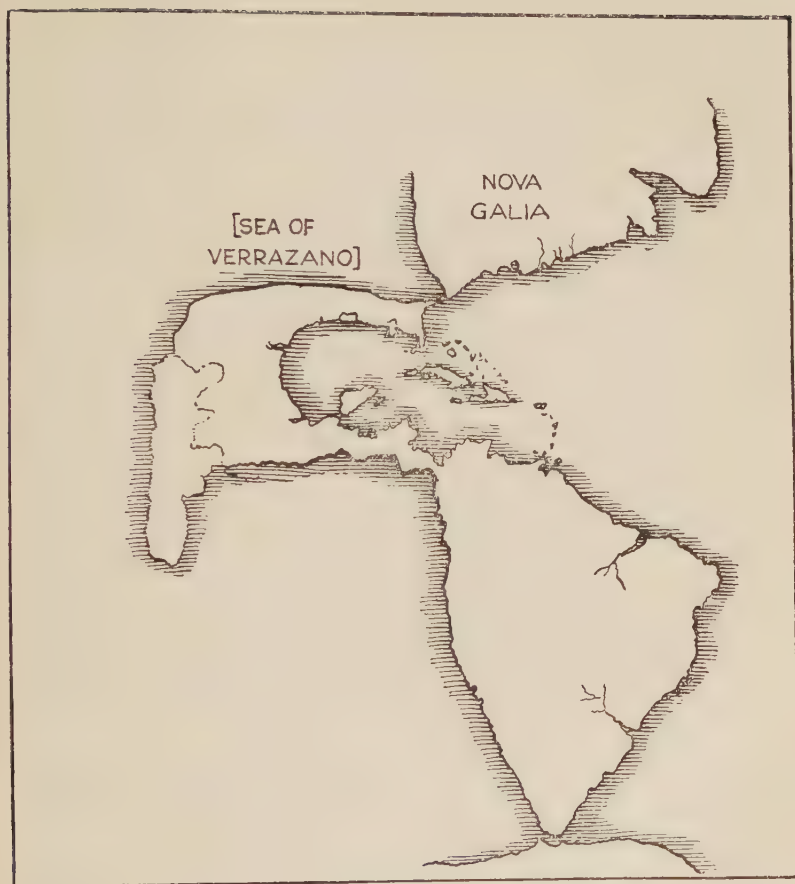
the coastline. Voyages to the Gulf of St. Lawrence were numerous, not only on account of the fishing business, but also because of the prevalent interest in a passage to the Western Sea. The mouth of the St. Lawrence, or rather the gulf into which this river flows, is peculiarly suggestive of a passage, and it is not unlikely that many seamen combined the adventures of exploration with the profits accruing from the capture of fish.³⁷ But French officialdom at last awoke from its lethargy. Francis I had become jealous of the conquests of his great rival of Hapsburg, which conquests he felt might soon yield enormous revenues, and, since he could not seize the territories already under Spanish control, he determined to enter the contest for the discovery of a northern route to the Spice Islands. He felt no inclination to respect the Hispano-Portuguese monopoly of the New World, and ironically demanded to be shown the clause in the will of Adam which divided the world between these two powers. His main purpose may possibly have been to pre-empt a portion of the American Continent with a view to establishing a colony, but in his first effort, namely, the voyage of Verrazano, the object is clearly the discovery of a water route to Cathay.

Francis made his arrangements shortly after the return of Magellan, and selected Giovanni da Verrazano, a Florentine, to lead the expedition. The plan excited the jealousy of Portugal, whose King kept a watchful eye on the proceedings. The Portuguese ambassador to France, João da Silveira, wrote his Majesty in April, 1523: "By what I hear, Maestro João Verrazano, who is going on the discovery of Cathay, has not left up to this date, for want of opportunity and because of differences, I understand, between himself and men; and on this topic, though knowing nothing positively, I have written my doubts in accompanying letters. I shall continue to doubt unless he takes his departure."³⁸

The ambassador did not long remain in doubt, for Verrazano presently began his journey in earnest. Sailing from Dieppe with four ships, he started for the American coasts, but storms and an encounter with Spanish vessels which he met on the way dispersed his fleet, and he was constrained to pursue his course in the flagship, *Dauphine*, to the Madeira Islands. Here he paused to refit, and on January 17, 1524, he again headed for America. For twenty-five days he sailed in a westerly direction, covering a distance of eight hundred leagues, when he encountered a violent storm. It was as severe a gale as he had ever experienced, but he managed to weather it in safety, and then changing his course to a more northerly one, drove on for four hundred leagues more until he reached the American coast which, he says, was a new land never yet seen by ancient or modern. Verrazano's exact landfall has been the subject of much discussion. He tells us in his report that he sighted the coast at the thirty-fourth parallel, but there are reasons for suspecting the accuracy of this statement. Since he was looking for an opening in the barrier he would, in all probability, have entered and explored Chesapeake and Delaware Bays as he sailed northward along the shore; yet he makes no mention of these two great indentations in the coastline. His landfall, then, must have been north of Cape May near the northern entrance of the latter gulf. Furthermore, his report says that he coasted southward for fifty leagues (or more correctly miles) from his landfall before he turned north. The calculations of Mr. J. C. Brevoort, therefore, place the landfall at Little Egg Harbor in $39^{\circ} 30'$, which would be far enough north of Cape May to allow Verrazano to sail fifty miles southward without entering Delaware Bay. It was probably at the southernmost point of his journey that he became aware of the existence of Delaware Bay, not as a gulf in the Atlantic Ocean, but as a separate body of

water lying west of the land in front of him. Verrazano's farthest south, if Mr. Brevoort's figures are correct, would bring him to the southern extremity of New Jersey, which terminates in a narrow peninsula separating Delaware Bay from the Atlantic. Here he must have seen the glimmer of water in the distance from his masthead and learned from the inquiries he addressed to the savages that there was a large body of water lying west of the narrow neck of land. The thought of the South Sea being ever uppermost in his mind it would have been natural for him to conclude that the land before him was an isthmus and the sea beyond a gulf or indentation of the South Sea. Though he makes no mention of this incident in his narrative, a map constructed by his brother, Jerome, in 1529, depicts a curious formation in this locality which could have come from no other source than Verrazano's experience here. The chart shows the North American Continent divided into two sections connected, in the neighbourhood of Delaware Bay, by an isthmus separating the Atlantic from an indentation of the Pacific, named on later maps the Sea of Verrazano. This isthmus is narrow and bears the inscription: "From this eastern sea [Atlantic] is seen the western sea. There are 6 miles of land between the one and the other." ⁸⁹

Verrazano proceeded northward and entered the lower bay of New York harbour. From there he coasted the southern shore of Long Island, rounded Montauk Point and worked his way inshore, sailing by Fisher's Island and Block Island to Narragansett Bay, which he entered. Thence his journey took him by Martha's Vineyard and Nantucket around Cape Cod to the coast of Maine. At this point he felt that he had reached the southern limit of Portuguese exploration and that nothing could be learned by sailing farther. Turning eastward, therefore, he crossed the Atlantic and reached Dieppe on the eighth of July. On his return he met with



MAP OF HIERONIMO DA VERRAZANO. 1529.

an enthusiastic reception. The merchants of Lyons were especially interested in the results of the voyage as they hoped to increase their business by trade with a colony which Verrazano was eager to found in America. But the difficulties which the King was then experiencing with foreign enemies prevented any further steps being taken at this time, and official attention was directed away from America for another decade.

In summing up the results of Verrazano's voyage, in so far as their influence on geographical knowledge is concerned, we can do no better than quote a portion of the explorer's report to the King. "My intention in this voyage," he says, "was to reach Cathay, on the extreme coast of Asia, expecting, however, to find in the newly discovered land some such an obstacle, as they [lands of the American Continent] have proved to be, yet I did not doubt that I should penetrate by some passage to the eastern ⁴⁰ ocean." ⁴¹ Then in order to show the scope of European exploration along the American Continent with a view, presumably of illustrating the magnitude of the obstacle thrown across the route to Asia, he continues: "But to return to ourselves; in the voyage which we have made by order of your Majesty, in addition to the 92 degrees we ran towards the west from our point of departure, before we reached land in the latitude of 34, we have to count 300 leagues which we ran northwardly, and 400 nearly east along the coast before we reached the 50th parallel of north latitude, the point where we turned our course from the shore towards home. Beyond this point the Portuguese had already sailed as far north as the Arctic circle, without coming to the termination of the land. Thus adding the degrees of south latitude explored, which are 54, to those of the north, which are 66, the sum is 120, and therefore more than are embraced in the latitude of Africa and Europe, for the north point of Norway, which

is the extremity of Europe, is in 71 north, and the Cape of Good Hope, which is in the southern extremity of Africa, is in 35 south, and their sum is only 106, and if the breadth of this newly discovered country corresponds to its extent of seacoast, it doubtless exceeds Asia in size."

The American coast was now fairly well surveyed. By this we mean that expeditions sent out by various nations had coasted the shore keeping on a constant lookout for a possible passage, and their commanders had deposited faithful reports of their voyages in the hands of their governments, and had placed the knowledge they had acquired before geographers and map-makers. The Spaniards had moved up the coast to $33^{\circ} 30'$ (the following year, 1525, Ayllon reached Chesapeake Bay at 37°), Verrazano had cruised from what he believed was 34° , to a point at the southern limit of the Portuguese and French fishing excursions; the only gap left was the short stretch between Chesapeake Bay and the southern extremity of New Jersey. Thus the shoreline was fairly well known to geographers, and the narrow isthmus said to connect the two parts of North America gave rise to a hope, which was later thoroughly exploited by the English in Virginia, namely, that the Western Sea was not far off.

Foreign complications prevented, as we have said, the French King from engaging in further exploratory activities after the return of Verrazano. When the peace of Cambray (1529) gave a momentary respite from the series of wars between Francis and Charles, Admiral Philippe Chabot seized this opportunity to introduce to the King Jacques Cartier, a native of St. Malo, who like many of his fellow-citizens had followed the sea from an early age. No account of the interview between the King and Cartier has come to light, nor has a copy of Cartier's commission been preserved, yet from several references in the narrative of

his first voyage we know that his object was the discovery of a route to China. In Cartier's opinion the probable location of a strait through the continent was in the vicinity of Newfoundland, for the voyage of Verrazano and the explorations of the Spaniards had shown him the continuity of the American coast below the St. Lawrence, thus precluding in his judgment the possibility of finding a passage in the lower latitudes; but his principal reason for going northward may have been due to his having heard of the great gulf of Nova Scotia (St. Lawrence) from Jean Denys or some fishermen who frequented that locality. The Breton fishermen, fearing lest a discovery of this kind in the neighbourhood of Newfoundland would rob them of the privacy they enjoyed on their fishing grounds, opposed Cartier's project, and it was necessary for the government to give orders forbidding them to place any obstacles in his path or to hinder him from enlisting a crew.

Cartier sailed from St. Malo on April 20, 1534. He reached Newfoundland after an uneventful passage, and encountering ice, he took refuge in Catalina harbour. From there he moved slowly up the eastern shore of the island, and doubling the cape at its northern extremity came down through the Strait of Belle Isle. For a short distance he clung to the mainland, then crossing to the western shore of Newfoundland, sailed southward across the Gulf of St. Lawrence to Prince Edward Island. Here Cartier turned to the coast of New Brunswick and worked his way slowly northward, carefully examining such indentations as he thought might offer an opportunity to pass to the Western Sea. The Baye des Chaleurs presented the first occasion for rejoicing. "By reason of the great depth and breadth of the gulf, and change of the lands," says Cartier, "we conceived hope that we should find a passage, like unto the passage of the Castles [Strait of Belle Isle]." ⁴² The land south of

the bay he called the Cape of Good Hope (Point Miscou) as evidence of his expectations. Gaspé Bay, which he entered next, did not seem inviting, so he crossed the Gulf of St. Lawrence to the island of Anticosti, and rounding its eastern extremity sailed westward up the belt of water between the island and the coast of Labrador. The course on which he was now sailing seemed to him more promising than any he had taken heretofore, for the farther west he sailed the narrower became the channel and the greater appeared the possibilities of a strait. But adverse winds and tides impeded his progress, and, as the season was now advanced, Cartier decided to return home before weather conditions should compel him to spend the winter on this barren coast. Yet he carried away with him the belief that he had found the long-sought passage between Anticosti and the mainland, for he says: "Now because upon St. Peter's day we entered into the said strait, we named it St. Peter's Strait." And so Cartier returned to St. Malo with the news that St. Peter's Strait was the key to the Western Sea.

Cartier's exploit roused enthusiasm for the work of exploration, and no sooner had he returned with his joyful news than preparations were immediately set on foot for a renewal of the undertaking the following year. The King himself was greatly interested. He issued a fresh commission on October 31, 1534, and selected substantial vessels for the undertaking, which he caused to be furnished with fifteen months' provisions in order that Cartier might have ample opportunity for making a thorough exploration of the lands he should discover while searching for the route to Cathay. Cartier sailed from St. Malo on May 16, 1535. Though his destination was the channel north of Anticosti he steered to Belle Isle Strait, for it must be understood that at this time he was ignorant of the main entrance to the gulf between Newfoundland and Nova Scotia. The Strait of St.

Peter was quickly negotiated and the explorer found himself once more in open water. Here the broad expanse of the Gulf of St. Lawrence lay before him, and in order to ascertain its extent he cruised southward until he struck the mainland. He then sailed up the coast to what may properly be called the mouth of the St. Lawrence River, that is, to the vicinity of Cape Chat. Recrossing, then, the gulf to Point de Monte on its northern shore he stopped to inquire of some Indians the extent and direction of the river. "The said men [Indians] did moreover certify unto us," runs his narrative, "that there was the way and beginning of the great river of Hochelaga [St. Lawrence] and ready way to Canada, which river the further it went the narrower it came, even unto Canada, and that then there was fresh water, which went so far upwards, that they had never heard of any man who had gone to the head of it, and that there is no other passage but with small boats. Our captain [Cartier] hearing their talk, and how they did affirm no other passage to be there, would not at that time proceed any further, till he had seen and noted the other lands, and coast toward the north, which he had omitted to see from St. Lawrence his gulf, because he would know, if between the lands toward the north any passage might be discovered." So Cartier turned back along the shore from Point de Monte and sailed, first northward, for the coast at this point takes a northerly trend, then eastward as it bends in that direction, until he came opposite the extremity of Anticosti, that is, back to the western end of St. Peter's Strait. By this proceeding he satisfied himself of the absence of any passage in this locality that led to either a northern or a western sea.

It now behooved him to explore the great river and see where it led, for there was always some possibility that its source might be near the western or northern extremity of the continent, where some means of communication could be

found with the Pacific. Lured on by this hope Cartier and his companions slowly made their way up the river, stopping only to make an excursion up the St. Charles River to the stronghold of the Indian chief, Donnacona. At Hochelaga, the present site of Montreal, Cartier paused. Here the Lachine Rapids, thundering down from the upper St. Lawrence, blocked the route to Lake Ontario, while the rapids at the mouth of the Ottawa River offered no encouragement for a passage. Whatever might lie beyond this point it was clear that no practical route to the Western Sea could be expected, and that communication with the Pacific, if there were communication in this direction, could not be maintained until a series of permanent establishments had been erected to serve as posts and resting stations along the route. Cartier's farthest west marks the limit of French exploration in Canada for eighty years.

On his return voyage down the river he made inquiries regarding the extent of the various streams he encountered, and the answers he received gave him, no doubt, a very confused idea of American geography, besides furnishing him with no clue to the route he was seeking. Far to the west, so he learned from his Indian friends, was a fresh water sea (Lake Huron), and to the south by the Richelieu River lay a land of tropical fruits, which he assumed to be Florida. The difficulty of communicating with savages whose language he did not fully understand was obvious to Cartier who felt that more accurate information could be gleaned if this handicap were removed. We find in Hakluyt an account of the steps taken for the proper education of interpreters. "When the French had their wants served all the year," says Christopher Carlisle in his *Discourse*, "and that as yet they saw not any appearance of their intended matter, which was the discovery of the passage, and yet imagining by the signs wherewith the willing people endeavoured to declare

their knowledge in that point, that some good matter might be had from them, if they might have been well understood, they resolved with themselves to take some of the sufficientest men of that country home into France, and there to keep them so long as that having once achieved the French tongue, they might declare more substantially their mind, and knowledge in the said passage, concluding this to be the mean of least charge, of least travail, and of least hazard." Whatever may have been the fate of the accounts they gave when they had mastered the French language, we cannot say, but the government took no further interest in the passage, satisfied, no doubt, that there was none in the localities explored by Cartier.

The third commission, given the explorer in October, 1540, makes no mention of the discovery of a passage; it deals solely with colonisation. Likewise the letters patent granted the Sieur de Roberval (January, 1540) authorising him to carry on the project of colonisation with Cartier are silent on the subject. The third voyage of Cartier, and the expedition of his colleague, Roberval, therefore, were not undertaken for the purpose of finding a passage, though Roberval appears to have been interested in the matter for he sent his pilot, Allefonsce, to search for a route by the northern seas. The voyage made by Allefonsce eventually became one of the bases of the French claims to Canada. According to the historian, Le Clercq, he coasted the shore of Labrador to the Strait of Belle Isle where he was turned back by the ice he found barring his course.⁴³ Allefonsce also makes an interesting comment on the Saguenay River which shows that the hope of a passage somewhere, somehow, to the Pacific had not been entirely abandoned by every one, though the following quotation is probably but a personal opinion. "The entrance of the Saguenay," says Allefonsce, "is in 48 degrees and $\frac{1}{3}$, and the entrance hath not past a

quarter of a league in breadth, and it is dangerous toward the southwest: and two or three leagues within the entrance it beginneth to wax wider and wider: and it seemeth to be as it were an arm of the sea: and I think that the same runneth into the sea of Cathay, for it sendeth forth there a great current, and there doth run in that place a terrible race or tide." "Further, Allefonsce had visions of a passage more to the south of the St. Lawrence at a latitude in the vicinity of Massachusetts Bay, for he says: "It were good to have a small ship of 70 tons to discover the coast of New France on the back side of Florida: for I have been at a bay as far as 42 degrees between Norumbega and Florida, and I have not searched the end thereof, and I know not whether it pass through." By the back side of Florida Allefonsce intends to convey the idea of a strait at latitude 42° which will lead to the western coast of Florida, not the western coast of the peninsula we call Florida, but the western coast of North America, for the term Florida, as employed by him and his contemporaries designated the vast territory south of New France.

We have now carried the story of the search for a passage to a point where the evidence gathered by the English, Portuguese and French explorers proved almost conclusively that the land to the west of Europe was an unbroken barrier stretching across the route to the Pacific. By a peculiar coincidence Cartier returned from his last voyage the year after Henry VIII made his final attempt to organise an expedition to America, an attempt, which, as we have seen, proved abortive. Thus the first phase of the effort by the French and English to find a passage (the Portuguese had long since lost interest in the problem) came to a close, and no attempt was made by either nation to renew the search until after the lapse of many years. We shall therefore seize this occasion to pause in our narrative of exploration and en-

deavour to enlighten the reader on the extent and nature of geographical knowledge in the middle of the sixteenth century, in order that he may be able to grasp more fully the problems which later explorers undertook to solve.

Juan de la Cosa, who accompanied Columbus on his second voyage, drew a map of the world embracing all the current knowledge of the Western Hemisphere. He knew from personal observation the extent of Spanish discoveries in the West Indies, and he undoubtedly had access in some way to Cabot's voyages, for the east coast of his North America bears the inscription: *Mar descubierta por Ingleses*. It is difficult, if not impossible, to say whether La Cosa intended the coast he depicts north of the West Indies to be a separate continent or an eastern projection of Asia. His map is not drawn in such a way as to make this point clear; we see merely a coastline at the western end of the map, while the land back of it ends at the edge of the sheet. There is no reason, however, to suppose that La Cosa in the year 1500 would think of the land discovered by Cabot as anything but Asia. He was a pilot on Columbus's second voyage, and was doubtless influenced by the geographical views of his commander. His own influence was small, as his map was not engraved and consequently did not circulate among geographers.

When Columbus and his immediate successors had explored the greater part of the northern and eastern shore of South America, and the dimensions of the western world became better known, it began to dawn on geographers that it was doubtful if Asia could extend so far east. As knowledge of the Western Hemisphere developed, and exploration slowly extended itself in various directions, cartographers adopted the opinion that the various parcels of land, which explorers had stumbled upon, formed a huge archipelago between Europe and Asia. The discoveries of Cabot and

Cortereal were known, but do not seem to have been interpreted in the early years of the sixteenth century as anything but an isolated region unconnected with the Spanish discoveries in the south. La Cosa forms the exception to this rule. This northern land usually called *Terra Corterealis*, for Portuguese sources of information on this region appear to have enjoyed a more general circulation than English ones, is represented as an island, as for instance on the globe of John Schöner, 1520, and Cantino's map of 1502. As a modification of this view Johan Ruysch, one of the most distinguished cartographers of his day, who had himself been to the new found lands on an English vessel, represented these regions on his *mappemonde* of 1508 as a projection of the Asiatic Continent, while the lands of the Spaniards were shown as islands. He drew the coastline of this projection from Cape Race, or as he calls it *C. de Portogesi*, at the southeastern extremity of Newfoundland, westward for thirty degrees. South America is shown as a continent detached from the other lands.

The school of geography represented by these maps was of short duration; it was soon superseded by the belief that the lands discovered by Cabot were an extension of those visited by Columbus in South and Central America. By the end of the first quarter of the sixteenth century much light had been thrown on the nature of the coast by the voyages of Verrazano, Gomez, Ayllon, Ponce de Leon and Piñeda, as well as by the explorations of Cortez and Balboa. Cosmographers who scanned the reports of English, French, Portuguese and Spanish navigators were now able to piece them together into one homogeneous whole and show an unbroken shoreline, though the survey of the coast had not as yet been carried out with sufficient precision to exclude the possibility of a loophole in the barrier south of the St. Lawrence through which one might penetrate to the Pacific; and, of

course, there was always the possibility of a passage around the northern extremity of Labrador. In a sense geographers returned to the sketch of La Cosa, though with their superior knowledge they far surpassed the crudities of this map. And strange to say, despite Magellan's voyage across the Pacific, they now assumed the eastern coast of North America to be the eastern coast of Asia, and united South America to it by an isthmus.

Why did geographers revert to the exploded belief that America and Asia were one? Peter Martyr in his *Enchiridion* gave a glowing account of the lands newly found by Cortez in Mexico, which, he said, were considered by the Spaniards to be a part of the Asiatic Continent. Martyr's work was published in 1521 and was soon followed by other books giving a similar account. Influenced by these narratives a Belgian friar, named Franciscus Monachus, issued in 1526 a book called *De Orbis Situ* in which was embodied the first map showing the connection between the two continents, a theory that became popular during the ensuing years. This chart shows in a crude way Asia and North America as one, with South America joined to it by an isthmus. This erroneous conception of the New World, strange though it may seem to us, particularly as it grew up after Magellan's voyage, did not appear so strange at the time, for Magellan, it must be remembered, had crossed only the southern part of the Pacific and was in no position to know how far north it extended. Hence geographers who held to the new theory regarded the Pacific as a South Sea, as it was then actually called, washing the southern shore of the Asiatic-American Continent. Orentius Fine's globe of 1531 is an excellent illustration of this theory, showing as it does the land connection between Mexico and the peninsula of Hindustan in Asia. The province of Cathay is here found in the western part of Mexico. There are many other maps showing this

conception. The point we wish to emphasise, however, is that the explorations we have described served to destroy the idea of North America as a group of islands through which a passage might be found in any one of several places. By 1560 the idea had fairly well disappeared.

As the work of exploration up the Pacific coast progressed it became evident that the land connection between Asia and America must lie farther to the north, and thus North America came to be looked upon more and more as a separate continent, until it appeared on some maps as a body of land joined to Asia only by a comparatively slender isthmus in the northwest. From this it was but a step to assume the existence of a strait through the isthmus, similar to Bering Strait which joins the Arctic to the Pacific Ocean. Indeed, rumours were soon current of various ships having made a voyage through such a channel. An excellent example of this theory is Zaltierri's map of 1566, which was the first to show the Strait of Anian, as the supposed passage was called for a long time. In addition to the presentation of North America as part of Asia we have another radically different conception which showed the continent as a narrow strip of land extending straight across the route to the East, and far removed from Asia. This, we believe, was inspired largely by the outline shown on the Verrazano map, an outline which underwent many modifications on later charts. Curiously enough the two conceptions of the New World originated almost simultaneously.

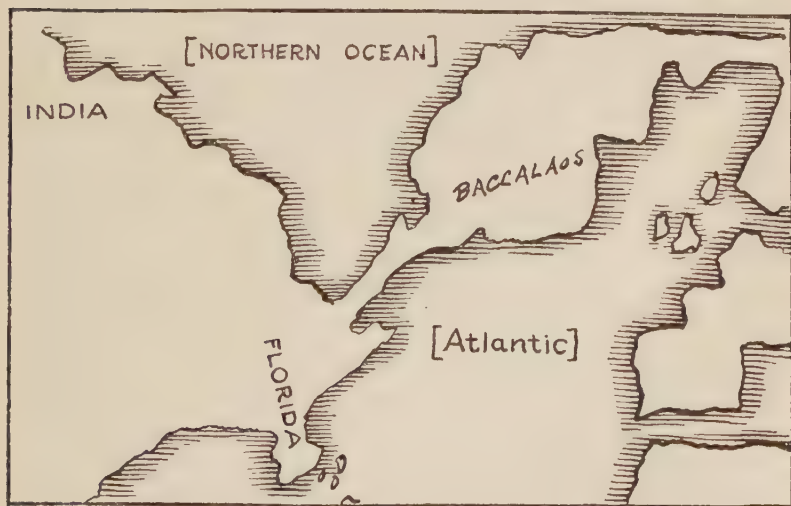
Verrazano's theory of the narrow isthmus and the proximity to the Atlantic of an indentation in the Western Sea had great influence on subsequent map-making. The chart produced by his brother Jerome in 1529 is not the first example of this conception of the American Continent; it was preceded by the map of Vesconte de Maggiolo (Maiollo) constructed in 1527, two years before Verrazano's brother

produced his sketch. These two maps give an outline of America radically different from those that bear an earlier date. We find on them the continent shown as comparatively narrow even at its widest point, and separated from Asia by a vast ocean. The distance between the two continents increases as one goes north, for the western coastline of America runs northeast and southwest, that is the map reverses the actual facts, for the western shoreline actually trends in a northwesterly direction as one approaches Alaska. Maps of the Verrazano type display variations, and a brief discussion of their more salient features must be made in order to enable the reader to understand more readily the state of geographical knowledge, or rather the various geographical theories that were advocated in learned circles, when Lok, Frobisher and Davis reopened the question of the Northwest Passage.

First, may be taken the type illustrated by the Verrazano and Maggiollo maps already mentioned, a type which represents the North American Continent as divided into two sections, joined by a narrow isthmus in the neighbourhood of Chesapeake Bay. The huge gulf on the western side of the isthmus, called the Sea of Verrazano is a branch of the Pacific Ocean, a point we wish to emphasise, as this sea goes through many curious transformations during the course of the century. The second type is exemplified by the chart of the New World found in the Ptolemy edition of 1530. It gives a North American Continent of considerable breadth, with the western coast running north and south instead of northeast and southwest as is the case with the Verrazano sketch. The northern shore on this map runs east and west and is indented by a huge gulf, like Hudson Bay though on a much larger scale, extending south almost to the Atlantic, where it is separated from that ocean by an isthmus. This is, of course, the Sea of Verrazano, shown as a gulf in a northern, instead of in a western ocean. Access to this northern



MAP OF NEW WORLD IN PTOLEMY EDITION PUBLISHED AT BASLE.
1530.



MAP ASCRIBED TO GIROLAMO RUSCELLI. 1544.

sea may be had by a strait between Greenland and Labrador; then by sailing westward and southward around the continent the traveller would find himself in the Pacific Ocean not far from the coast of Asia. This map is but a modification of Verrazano's idea; it shows North America composed of two sections connected by an isthmus, but the southern section has been enlarged in such a fashion that it extends northwestward, thus forcing the Sea of Verrazano into the position of a gulf in a northern instead of in a western sea.

Agnese's map of the world of 1536 is a fine uncompromising specimen of the belief that America was a separate continent. The author constructed a large number of charts, and as they were well made, many have been preserved, and doubtless they exercised influence in their day. Agnese lived in Venice where he was in contact with a circle of persons who kept in touch with the discoveries of the various European nations active in America at this time. He shows us a North America washed on its western shore by a vast ocean which stretches for a long distance to Asia. A generous strait opens between Greenland and the American Continent, inviting navigators to try their fortunes. Agnese, however, seems to suggest a short cut across the isthmus joining the two portions of North America in the accepted Verrazano style, for he draws a dotted line from France over the isthmus to Cathay, with the inscription: "*El viages de France.*" The presence of this isthmus on so many maps would, one would suppose, have induced the English to take up their search in this locality when they renewed their interest in the route to Cathay. Their failure to do so was due to their desire to find a water passage, while this route involved a journey, albeit a short one, overland. Later, when the English settled in Virginia they entertained a belief, fortified by erroneous accounts given them by the Indians, of the proximity of a western sea, which led them to under-

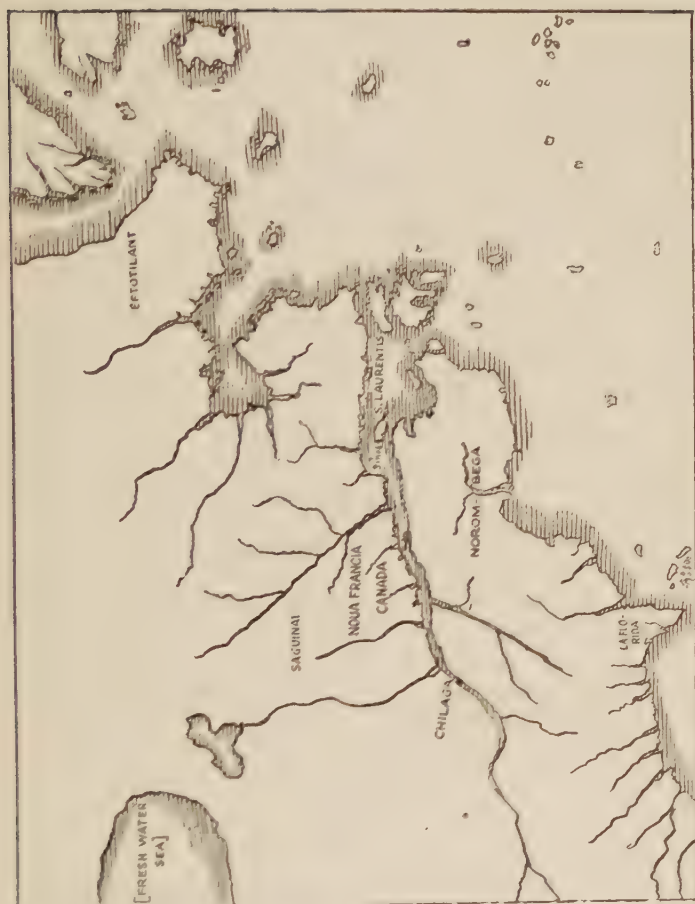
take many voyages up the various rivers that flow into Chesapeake Bay for the purpose of finding it. This belief may, indeed, have come down from the Verrazano tradition.

Ruscelli's map of 1544 combines the Verrazano theory with the belief that America and Asia are one. The northern and southern portions of the continent joined by the isthmus, are called Terra de Baccalaos and Florida respectively, and the former is joined by a strip of land to Greenland and Norway, shutting off any communication with the western and northern seas. The Sea of Verrazano, here called *Oceanus Settentrionalis*, is shown, as its title would indicate, as a huge gulf in the northern ocean very similar to the Ptolemy sketch. The southern or Florida section of the continent extends westward until it merges into Asia, thus making the two continents one. The *Oceanus Settentrionalis* is then a sea between Terra de Baccalaos and India Superior, and in order to reach the latter one would be obliged to cross the isthmus from the Atlantic and embark on the Sea of Verrazano. The curious thing about Ruscelli's map is the author's apparent ignorance of Cartier's explorations, and this at a time when Sebastian Cabot was giving them full recognition on his *mappemonde* of 1544.

The maps we have just described all show the northern portion of the American Continent as narrow; but now the influence of Cartier begins to make itself felt. Cartier had discovered a mighty river in this portion of the New World, and as he gave a complete description of its length, its volume, and its extent westward, the reader of his narrative must have become impressed by the magnitude of the continent, for no such narrow strips of land as are given on some of these maps could supply the drainage for such a magnificent stream. Sebastian Cabot was one of the first to do justice to Cartier, for he gives an excellent picture of the St. Lawrence on his *mappemonde*. This part of the chart

may be considered as his prime contribution to cartography. Fourteen years later we find a chart by Diego Homem that shows great familiarity with Cartier, but he gives Cartier's account a curious interpretation. The St. Lawrence River as he depicts it can scarcely be called a river; it is rather a sound reaching far inland from the Gulf of St. Lawrence and interspersed with numerous islands. Its northern shore, if one can call it a shore, is in reality a string of islands separating it from a northern sea. This gives not only a passage, but a number of passages into the Arctic Ocean. It is an odd conception.

We turn now to a map which is the finest production of the sixteenth century, the *mappemonde* of Mercator, published in 1569. Gerard Mercator was the greatest cartographer of his day and the founder of the Dutch school of map-makers that attained its zenith in the seventeenth century. On the chart in question the author shows North America with a true sense of perspective. He sketches a large continent separated from Asia at its northwestern extremity by the narrow strait of Anian, very similar to the configuration of Alaska and Bering Strait. The map is the result of years of study and a careful examination of all available geographical information. By an inscription on the chart Mercator acknowledges his indebtedness for his knowledge of the Atlantic coast to various explorers, and he mentions the principal ones who have penetrated the northern regions. Gaspar Cortereal, he says, navigated these lands in the hope of finding a strait, Breton sailors visited the Gulf of St. Lawrence in 1504, Verrazano sailed the coast in 1524, and lastly Cartier explored the St. Lawrence. The delineation of the St. Lawrence shows a very careful study of Cartier's voyages. The river is drawn as far as Cartier explored it, that is as far as Hochelaga (Montreal), with due attention to detail. The Saguenay River empties into it



GERARD MERCATOR. SECTION OF *Mappemonde*. 1569.

from the far north where it takes its rise in a chain of mountains; while from the south comes a river that is intended for the Richelieu. At Hochelaga we see the streams, the upper St. Lawrence and the Ottawa, uniting to form the main body of the river; and to the northwest is a dim outline of the freshwater sea whose bounds were unknown even to the Canadian Indians. Here Mercator has guessed, solely from a study of Cartier's narratives, the true nature of the problem which faced the explorer when he stood on the summit of Mount Royal.

CHAPTER II

THE ENGLISH SAIL FOR THE NORTHWEST PASSAGE

Organisation of the Muscovy Company.—The English attempt the Northeast Passage.—Humphrey Gilbert's *Discourse on the Northwest Passage*.—Richard Willes's opinions.—Frobisher's voyages.—Drake's exploration of the Pacific Coast.—Richard Hakluyt.—Expeditions of Henry Davis.—Geographical knowledge gathered by Frobisher and Davis.

WHEN Queen Mary ascended the English throne in 1553 the belief that North America was substantially a separate continent, joined perhaps to Asia in its northwestern portion, was fairly well established. Spanish exploration up the Pacific Coast had showed the South Sea to extend farther north than had been previously imagined. An expedition under Juan Cabrillo started to explore the western shoreline of Mexico in 1542, and went north to the thirty-eighth parallel when its leader died, leaving Ferrelo, the second in command, to carry on the work. Ferrelo, according to observations made on the spot, proceeded as far as 44° , though this figure is now believed to be one or two degrees above the actual point reached. At any rate the results of the expedition gave a blow to those contending that Mexico adjoined Asia. Some geographers still clung tenaciously to the old belief, and reconciled it with Ferrelo's calculations by merely placing the southern shoreline of the Asiatic-American Continent far enough to the north to conform with the new requirements. This compromise is well illustrated by the *Carta Marina* of 1548.

It was, however, the general opinion of those who had made a study of the subject that a passage through the American barrier existed somewhere in the northern Atlantic,

but this opinion was not based on actual observation, for as yet no one had penetrated far enough into the northern passages, such as Hudson Strait and Davis Strait, to give colour to such a belief; nor had the fictitious stories of voyages through a strait to the Pacific yet come into general circulation. Peter Martyr, as we have seen, deduced a theory of a passage from Cabot's account of the conditions in the northern latitudes, where the waters of the ocean were said to move in a westerly direction, and where "certain great open places" existed in these localities through which the waters flowed to make a complete circuit of the globe. This theory, later to become a popular one, is illustrated in the following extract of a letter written by Martyr to Pope Leo X: "It is the universal opinion," he says, "that the waters flow toward the west like mountain torrents. . . . But where do they go in thus running continually from the east to the west without ever returning without the west becoming filled and the east empty?—I do not know.—If by the law of gravitation we say that they tend towards a centre, and that we assume the equinoctial line to be that centre, as many persons think, what must its capacity be to contain so many different waters in so great quantities, or what will be its circumference? Those who have explored these shores give no reasonable answers to these questions.—Generally speaking they think that there are vast straits at the head of some gulf of this immense land which (land) we have represented as ten times as large as Italy, and situated west of Cuba,¹ to absorb there all these waters and send them back towards the west until they come back to the east of our side; others say towards the north.—According to some the gulf of this great land is closed towards the north on the other side of Cuba, in such a manner that it embraces the lands that the Glacial Sea surrounds towards the north pole, and that its shores are contiguous—which causes them to think that these

waters make a circular current, turned from their path by the obstacle which this great land makes, as happens in rivers, by the detours of the banks. But that does not seem probable, for those who have touched these northern seas and have then sailed westward, say that these waters run in a constant direction in the same way as a flood tide which is not violent but calm.”² This peculiar idea of the water rushing like a torrent from east to west is one that had a great influence in directing the voyages of discovery towards the northwest, for explorers were constantly on the lookout for currents which they believed would indicate the proximity of a passage. Ramusio, also enthusiastic for the discovery of a strait, in whose existence he thoroughly believed, says that God has perhaps reserved the discovery of a route to Cathay by which spices could be brought more readily than by any other, for some great prince; and he characterises such a discovery as one that would bring greater glory to that prince’s name than the wars that are continually ravaging Europe.³

Meanwhile a gradual change had been going on in English trade that involved a necessary shift in the direction of foreign business. Merchants had been in the habit of purchasing Oriental goods from the Hanse towns, sending their products in payment for them, but the discovery of the water route to the East by the Portuguese caused a decline in the Hanse trade, and the English seeing their markets dwindling determined to seek a new outlet by trading directly with the Far East themselves. For this reason a call was sent to Sebastian Cabot requesting him to come and lend his geographical knowledge in the search for new countries. For some time Cabot, who during this period had been residing in Spain where he enjoyed a distinguished and lucrative position, had been thinking of returning to England. Inducements in the shape of a liberal pension were finally offered

him, and he arrived at his former home in 1548. The King of Spain attempted to retain his services by ordering his return, but Cabot declined to comply with the command on the ground that he was a British subject. The solution which Cabot offered for the rehabilitation of trade was the discovery of a route in the northern part of the world leading to new markets, as Spain and Portugal had done in the south. So far the English had been blocked in their attempts to find a passage by the northwest. Robert Thorne's scheme of trying to sail directly across the North Pole met with little sympathy, and, consequently, by a process of elimination, it was decided to act upon Cabot's advice and attempt the Northeast Passage along the northern coast of Asia. This route had not as yet been tried and there was a possibility of its proving successful.

Late in the year 1552 an association of merchant adventurers was formed, consisting of some two hundred members, and including such prominent men as the Marquis of Winchester, William Howard and William Cecil. Its object was to open trade with Cathay by the Northeast Passage. Sebastian Cabot was retained by the company as an expert adviser, and was subsequently appointed its first governor, a position that was later confirmed by the charter. Under his leadership the sum of six thousand pounds was raised, and three vessels were chartered to make the voyage under Sir Hugh Willoughby and his lieutenant, Richard Chancellor. The expedition was something of a national undertaking as well as a private enterprise, for Willoughby was authorised to collect his crews by impressment, if necessary.⁴ The little fleet sailed on May 20, 1553. It met with storms; the vessels became separated, and Willoughby, in attempting to pass the winter in the White Sea with two of his ships, lost his way and was unable when he reached shore to establish communication with any human habitation. He perished

with his crews during the winter. Chancellor, who meanwhile had stopped in Norway, successfully wintered through the cold season, and the following year made his way to Archangel. Here he got into touch with Ivan the Terrible and visited that monarch at his capital in Moscow. A treaty was drawn up between the two establishing advantageous trade relations for the countries they represented, and Chancellor returned to England with the gladsome news that business relations with Russia were now on a solid basis. The merchant adventurers were granted a charter by Queen Mary on February 6, 1555, and incorporated themselves as the Muscovy Company.

Once trade with Russia was assured the company decided to penetrate into Asia using Moscow as a base, and to organise commercial relations with Persia and possibly with China. For this purpose they sent out their agent, Anthony Jenkinson, in 1558. Jenkinson descended the Volga and crossed the Caspian Sea to the Persian town of Bokhara, the well known mile-post on the old northern trade route, where he found merchants from India and Cathay and learned from them that the latter country was nine months' journey from Bokhara. Later this route from Russia to Persia was closed. Others were tried with varying degrees of success, for trade with Persia was difficult owing to the depredations of robbers. Furthermore, wars between the Turks and Persians made it impossible to keep a line of communication open despite the friendly assistance of the Muscovite government; and to make matters worse a revolution in 1571 destroyed the company's stores in Moscow.⁵ The road to Cathay was, indeed, difficult whether one attempted it by sea or by land.

During its efforts to open overland communication with the Far East the company had not neglected the Northeast Passage. An abortive attempt was made under its auspices

in 1556 when Stephen Burrough was dispatched on an expedition which led him as far as the Kara Sea, which lies east of Nova Zembla and Vaigach Island. Nine years later Anthony Jenkinson, who took great interest in the route to Cathay, wrote Queen Elizabeth urging her to promote the work of discovery on the ground that commodities could be obtained from the tropics if "this region of Cathay might be discovered, and passage found thither by the north." It would also enable English manufacturers, he said, to dispose of their woollen goods in the cold regions of the northern strait. Nor should the passage be impracticable, as the long days of the Arctic summer caused the polar regions to be more temperate than was generally believed. He doubted the possibility of finding a passage by the northwest, however, but quotes conversations he had with Cathayans to prove the probability of a water route by the northeast. He learned from them that the currents and tides on the northern coast of Asia run east-southeast and west-southwest "which manifestly argueth a passage." He also tells of the discovery of the head of a unicorn on the island of Vagattes (Vaigach) not far from the mouth of the Obi River; and as unicorns were bred in Cathay he "fell into consideration that the said head was brought thither by the course of the sea."⁶ This discourse may have exercised the desired influence on English adventurers, for three years later elaborate preparations were made to undertake a voyage of discovery, but for some unknown reason the scheme was abandoned on the eve of departure. A final attempt was made in 1582, after Frobisher's voyages to the northwest had ended in failure. Arthur Pett and Charles Jackman were given a commission to explore the northern Asiatic shore east of the Obi River and to discover, if possible, the route to Cathay, which was believed to lie beyond this point. They were specifically instructed to follow the coast of Asia, whether it trended

north or south, so anxious were the backers of the expedition to have the question settled once and for all. The result was, of course, a failure. Pett and Jackman penetrated as far as the Kara Sea, where blocked by ice and wind Pett was obliged to return after losing his companion. It was the last voyage in this direction attempted by the Muscovy Company. Thus the route to Cathay by the Northeast Passage was proved to be an impossibility, and men now turned all their attention to the vain effort of reaching the Far East by the equally impossible route of the northwest.

England was now entering upon the Elizabethan period of her maritime history, a period when the very air tingled with the spirit of discovery and adventure. This spirit, though not entirely suppressed since the days of the Cabots, had been in a large measure held in check, so that it now burst forth with unparalleled vigour, and gave impetus to surprising deeds of seamanship. The nation was now awake; the eve of that expansion overseas, which transformed England from an island kingdom into a world empire, was at hand. Behind the sea captains and explorers, whose exploits shine brightest in this colourful epoch, stand the men of science and learning who furnished the driving power for the work, and organised the expeditions which the seafarers were to lead. Among these promoters we find such names as Humphrey Gilbert, himself a sailor, Richard Hakluyt, Michael Lok and Sir Walter Raleigh.

The change in the mental attitude toward English maritime enterprise, which had been going on during the sixteenth century, culminated in the reign of Elizabeth, and the historian who has been obliged to satisfy himself with scraps of information in compiling a naval history is now rewarded with an abundance of material. "There hath been two special causes in former age," writes George Best in 1578, "that have greatly hindered the English nation in their attempts

[at exploration]. The one hath been, lack of liberality in the nobility, and the other want of skill in the cosmography, and the art of navigation. . . . But these two causes are now in this present age (God be thanked) very well reformed; for not only her majesty now, but all the nobility [are] also [interested], having perfect knowledge in cosmography, [and] do not only with good words countenance the forward minds of men, but also with their purposes do liberally and bountifully contribute unto the same, whereby it cometh to pass, that navigation, which in the time of King Henry the 7th was very raw, and took (as it were) but beginning (and ever since hath had by little and little continual increase) is now in her Majesty's reign grown to his highest perfection." ⁷

The object of all this enterprise was primarily commercial, coupled with a fear that England would soon be outdistanced politically by rival countries unless she exerted herself and acquired some portion of the newly discovered regions, and a share in the Eastern trade. Besides, a mercantile marine which such a trade would engender would furnish employment for the numbers of idle persons that swarmed about the country; and the manufacture of goods to be sent in exchange for the commodities imported would also supply these people with work. Likewise, as one authority puts the case, such a policy would lead to "the avoiding of commodities and perils that we be now subject unto, when the wealth and work of our land and people dependeth partly upon the will of our scant trusty neighbours for vending our cloths and commodities." ⁸

Sir Humphrey Gilbert, whose work as a promoter of exploration we shall now examine, was born about 1539. He was educated at Eton and Oxford where he specialised in the studies of war and navigation. After serving in a military capacity under Sir Henry Smith in Ireland, he returned to

London where he presently broached to a group of friends, among whom was Anthony Jenkinson of the Muscovy Company, the project which he had long had in mind. This was the discovery of a route to Cathay. In a petition addressed to the Queen in 1566 Gilbert pointed out that nothing had been done in latter years to carry out this important undertaking, and he, therefore, volunteered to make the attempt at his own expense and with the financial assistance of his friends, if the Queen would grant him a monopoly of the passage he hoped to discover. Though nothing had been done it was not because the matter had not been urged on the government. Jenkinson had written the previous year to the Queen urging the discovery of the route to Cathay in the strongest terms. Spain had found the western world, he said, but the best was yet undiscovered, for the famous land of Cathay abounded in gold, silver and precious stones; and furthermore if the passage were found by a northern route, or more specifically by a northeastern one, it would be through cold regions where a market could be found for English woollens. Jenkinson favoured the northeastern route over the northwestern one in contradistinction to the theories of Gilbert. His familiarity with Asia no doubt biased his judgment, for he mentions several reasons to uphold his opinion, reasons based on information he had gathered while in Muscovy.⁹ Unfortunately Jenkinson's suggestions met with no response and he soon saw the futility of pushing his schemes any further. Instead he now wrote to Sir William Cecil saying that he would like to join with Gilbert, since he could get no action from the government for launching an expedition to find the Northeast Passage, and try his luck to the northwest in consideration of certain privileges.

Encouraged by this offer of assistance Gilbert presented a memorial to the Queen stating that he was a member of the

Corporation for Discovery of New Trades, and as such felt encouraged to attempt the passage to Cathay "and all other rich parts of the world not found," provided he could obtain from the Crown concessions involving the governorship of the lands to be discovered, a tenth share in the profits of trade with them, and a reduction of custom dues on such trade.¹⁰ Objections to the proposal were at once raised by the Muscovy Company. Attempts to find a route had been made by them, they said, and it was their intention to try again, but they insisted on managing such an expedition themselves, although they would gladly welcome Sir Humphrey and profit by his advice; but they pointed to some of the privileges demanded by Gilbert as being derogatory to their own rights.

Owing to these objections Gilbert was obliged temporarily to abandon his schemes of exploration, but meanwhile his energy for work in this field found an outlet in the composition of his *Discourse on the Northwest Passage*. This pamphlet is the first of four prominent works on the passage and kindred subjects; the other three were written by Richard Willes, Richard Hakluyt and John Davis. It was not Gilbert's intention to publish his essay, but in an unfortunate moment he showed it to his friend George Gascoigne, the dramatist, who, struck with the force of the arguments set forth by the author, caused the work to be published in April, 1576. Gilbert's arguments, as set forth in his *Discourse*, probably exercised a direct influence in securing the necessary backing for Frobisher's first voyage. Frobisher was a kinsman of Gascoigne, and the latter may very well have used the proofs offered by Gilbert to enlist the aid of friends and other interested persons in the project of a voyage of discovery under the command of Frobisher. Gilbert begins his *Discourse* by telling the reader of his studies in geography and of the conclusions regarding America to

which they had led him: "I came in fine," he says, after a discussion of the various parts of the globe, "to the fourth part of the world, commonly called America, which by all descriptions I found to be an island environed round about with sea, having on the south side of it the fret or strait of Magellan, on the west side *Mar Del Sur* [South Sea], which sea runneth towards the north, separating it from the east parts of Asia, where the dominions of the Cathayans are: on the east part our West [Atlantic Ocean], and on the north side the sea that severeth it [America] from Greenland, through which northern seas the passage lieth, which I take now in hand to discover."¹¹

Gilbert began his proofs of the existence of a passage by citations from classical authority, which we shall omit, and then undertook to prove his point by reasonings based on known, or supposedly known, facts. It is a general principle of oceanology, he says that the nearer one gets to a bay or haven the shallower the water becomes, but it has been found by experience that in going towards the northern part of America, where the strait is supposed to be, the water becomes deeper, hence it is highly probable that the ocean ends, not in a bay, but in a strait lying somewhere in this northerly direction. Further, if America were not an island but a portion of the Asiatic Continent one would be certain to meet there inhabitants of China, or, at least, Scythians and Tartarians, who would find the climate of North America more congenial than their own; yet Portuguese, Spanish and French explorers have never discovered any of these people in all the extent of their travels along the coast. Likewise no trace of animals whose habitat is Asia, has been found in America, nor have American animals been found in China. Another proof of the presence of a strait is based on the ocean currents observed in the Atlantic, a proof which resembles strongly the line of reasoning followed by Peter

Martyr in his letter to Leo X. "The sea," reasons Gilbert, "runneth by nature circularly from the east to the west, following the diurnal motion of the Primum Mobile, which carryeth with it all inferior bodies moveable, as well celestial as elemental: which motion of the waters is most evidently seen in the sea, which lieth on the south side of Africa, where the current that runneth from the east to the west is so strong (by reason of such motion) that the Portugals in their voyages eastward to Calicut, in passing by Cape *de Buona Sperança* are forced to make divers courses, the current there being so swift as it striketh from thence all along westward upon the fret [i.e., Strait] of Magellan, being distant from thence, near the fourth part of the longitude of the earth: and not having free passage and entrance through the fret towards the west, by reason of the narrowness of the said Strait of Magellan, it runneth to salve this wrong (nature not yielding to accidental restraints) all along the eastern coasts of America, northwards so far as Cape Fredo, being the farthest known place of the same continent towards the north: which is about 4800 leagues, reckoning therewithal the trending of the land. So that this current being continually maintained with such force, as Jacques Cartier affirmeth it to be, who met with the same being at Baccalaos, as he sailed along the coasts of America, then either it must of necessity have way to pass from Cape Fredo, through this fret, westward towards Cathay, being known to come so far, only to salve his former wrongs, to the authority before named: or else it must needs strike over, upon the coast of Iceland, Norway, Finmarke, and Lapland, (which are east from the said place about 360 leagues) with greater force than it did from Cape *de Buona Sperança*, upon the fret of Magellan, or from the fret of Magellan to Cape Fredo, upon which coasts Jacques Cartier met with the same, considering the shortness of the cut from the said Cape

Fredo, to Iceland, Lapland, etc. And so the cause sufficient remaining, it would have continually followed along our coasts, through the narrow seas, which it doth not, but is digested about the north of Labrador, by some through passage there through this fret." We have quoted this excerpt at length as it is an excellent exposition of the popular fancy which is found again and again in the geographical literature of the day. The theory is simply this. The rotation of the earth on its axis from west to east causes the waters of the ocean to flow in the opposite direction. Swinging around the Cape of Good Hope the current hurls itself on the South American coast. Here it finds the Strait of Magellan too narrow to admit the entire volume of water—the land south of the strait was thought to be a continent at this time—and swerves northward along the coast as far as Labrador. If there were no strait at this point, Gilbert argues, the waters must rebound to Iceland and the Norwegian coast, but as no such counter-current is noticeable he concludes that the waters must disappear through a passage which brings them back to the Pacific, thus making a complete circuit of the globe.

Gilbert gives still another series of proofs, namely, those based upon what he believed to be authentic reports tending to show the presence of open water between Asia and North America. He tells of one Paulus Venetus, who lived many years in Cathay and cruised about the eastern shores of Asia for fifteen hundred miles, finding open seas before him as far as he could discern. Coronado, the Spanish explorer, is also cited as having seen on the western coast of America "certain ships laden with merchandise, carrying on their prows the pictures of certain birds called Alcatrarzi, part whereof were made of gold, and part of silver, [the sailors] signified by signs, that they were thirty days coming thither: which likewise proveth America by experience to be dis-

joined from Cathay, on that part by a great sea, because they could not [have] come from any part of America, as natives thereof: for that, so far as is discovered, there hath not been found there any one ship of that country." The geographers of China are then summoned as witnesses to testify that the seacoast of Asia trends to the northeast to 50° north latitude, and that for all they know to the contrary it may continue in that direction much farther. Thus there could be no connection between America and Asia. Other witnesses are brought forward, including Jacques Cartier, whose sea in the far west (it was a fresh water sea) is regarded by Gilbert as indication of a passage.

Further proofs are offered in the shape of narratives by persons who are said to have passed through the strait, narratives which, to say the least, are vague and unreliable. According to Cornelius Nepos, who wrote in the first century B.C., "there were," says Gilbert, "certain Indians [inhabitants of India] driven by the tempest, upon the coast of Germany which were presented by the King of Suevia, unto Quintus Metellus Celer, the Proconsul of France." The same remarkable incident, he adds, took place in the twelfth century during the reign of Barbarossa. According to Gilbert's ingenious reasoning, these Indians could not have come from Asia to Germany by way of Cape of Good Hope because the seas along the route were too rough, nor could they have come by the western shore of Africa because the off-shore winds which prevail along this coast would have blown them westward to America, where they would have perished from lack of supplies. It was likewise impossible for them to come by sailing eastward to South America for the Strait of Magellan was closed to them by the swift current running westward through the passage. A voyage by the Northeast Passage was also improbable, even if there were such a passage, for Indians would have perished from

the cold in those high latitudes where darkness makes the travel difficult and the compass (as though Indians of the twelfth century had a compass) does not function. The route of the Indians, then, by a process of elimination must have been by the Northwest Passage, and this is all the more probable as the prevailing winds on the North Atlantic are westerly, which would make the transatlantic voyage more feasible for those inexperienced in the art of tacking. The reasons are specious enough as one can see at first glance, and the statement that an off-shore breeze on the coast of Africa could blow a vessel across the Atlantic to the American coast borders on the ludicrous. Gilbert also mentions two or three accounts of spurious voyages of more recent date, among which is one that he claims to have learned from a reliable source when he was in Ireland. This relates to a Spaniard named Salvaterra, who told him of one Friar Urdaneta of Mexico, who in 1560 came through the passage from the *Mar del Sur* to Germany, where he produced a chart of the strait that agreed at all points with a map by the geographer Ortelius. The friar had reported his discovery to the King of Portugal and boasted of his intention to publish an account of it, but he was dissuaded from taking this step because of the trouble it might cause the Spaniards and Portuguese if the English were to get wind of the discovery.

There was evidently some difference of opinion between Gilbert and his colleague, Jenkinson, over the merits of the Northeast and Northwest Passages, for Gilbert devotes some little space to comparing the two to the disadvantage of the former. He points out that the Northeast Passage would be in high latitudes where travellers would suffer greatly from the cold—he seemed confident of the warmth of the northwestern strait—and where ice would prevent navigation except for a portion of the year. The Northwest Passage, on the other hand, would prove the shorter of the two,

and would offer much easier access to the Moluccas; moreover, there was always the danger of the Muscovites getting control of a trade route with the East if it were established to the north of Asia.

The *Discourse* closes with a recital of the advantages accruing to the government and to the business interests of England by the discovery of a passage. "For through the shortness of the voyage," says Gilbert, "we should be able to sell all manner of merchandise, brought from thence [the East], far better cheap than either the Portugal or the Spaniard doth or may do. And further, we should share with the Portugal in the East, and the Spaniard in the West, by trading to any part of America, through *Mar del Sur*, where they can no manner of way offend us." It would also be possible to sail to various countries where great wealth could be found. Settlements of needy people that "now trouble the commonwealth" could be affected in these new regions and thus save many from prison and the gallows. The children of the poor could obtain employment by making such trifles as the Indians prize.

Gilbert accompanied his *Discourse* by a map of crude workmanship. It has little to recommend it even for those days of faulty geographical knowledge; its principal object is to illustrate the thesis maintained in the book. The delineation of the St. Lawrence region, which the map shows, resembles somewhat the peculiar archipelago formation of the northern shoreline of the river as given by Homem on his chart of 1558, for Labrador, Canada and Baccalaos are shown as islands off the American coast, with ample room between them for passage into the northern ocean.

Shortly after Frobisher's return from his first voyage in 1576 a treatise on the Northwest Passage, embodying many of Gilbert's arguments, was compiled by Richard Willes. Willes was a man of some learning who had travelled ex-

tensively in Germany, France and Italy, and was therefore in touch with the leading thought on the subject. He speaks in his pamphlet of four ways of going to the Moluccas, namely: the Cape of Good Hope route, the Strait of Magellan, the Northeast Passage, and lastly the Northwest Passage described by Gilbert. "But the way is dangerous, the passage doubtful," he says in reference to Gilbert's strait, "the voyage not thoroughly known, and therefore gainsaid by many, after this manner." A series of objections to the strait is then raised which throws considerable light on the controversy raging in England at this time over the question of a passage. These objections are excellent and far more logical, as subsequent knowledge has demonstrated, than the arguments in favour of the strait put forth by Gilbert and his associates. Since the latitude of northernmost America and northernmost Europe are nearly the same, reasons Willes, it follows that the temperature in both localities must be similar, hence the fate of Willoughby would be reenacted in the Northwest Passage. But suppose the passage were farther south, say between 61° and 64° , as reported by Sebastian Cabot, it would not therefore follow that there would be a free passage to Cathay. For example, says Willes, there is no through passage between the Red Sea and the Mediterranean and "in like manner although the northern passage be free at 61 degrees of latitude, and the West Ocean beyond America, usually called *Mar del Zur*, known to be open at 40 degrees elevation from the island of Japan, yea three hundred leagues northerly above Japan: yet may there be land to hinder the through passage that way by sea, as in the examples aforesaid it falleth out, Asia and America there being joined together in one continent."¹² Willes further reminds his readers that since there is a strong current running through the Strait of Magellan to the west, the same condition will probably be found in the Northwest Passage.

Having stated these popular objections to the passage, Willes proceeds to refute them. He relies for this purpose principally upon a map of Cabot,¹³ the accuracy of which he does not question. Cabot on this chart placed the eastern mouth of the strait between 61° and 64° and ran the passage for a distance of ten degrees towards the west, "where it openeth southerly more and more, until it come under the Tropic of Cancer, and so runneth into the *Mar del Zur*, at the least 18 degrees more in breadth there, than it was where it first began: otherwise," says Willes, "I could as well imagine this passage to be more unlikely than the voyage to Moscovia, and more impossible than it for the far situation and continuance thereof in the frosty clime: as now I can affirm it to be very possible and most likely in comparison thereof, for that it neither coasteth so far north as the Moscovian [Northeast] passage doeth, neither is this strait so long as that, before it bow down southerly towards the sun again."

Several documents, showing how keen was the interest in the passage, have been preserved besides these two treatises. One suggests a strait through America in latitude 67° by which the East could be reached in thirty days, over a course of six thousand leagues (perhaps the author meant miles) instead of the fifteen thousand by the Strait of Magellan.¹⁴ Another rehearses many of the arguments presented by Gilbert, especially the statements regarding persons who had already made the passage. It is unnecessary to discuss all these records or to describe their arguments in detail; the chief reasons for belief in the passage were worked out by Gilbert, and his book covers them all. The numerous papers that have been published in various works show how keen was the interest in the subject during the period from the beginning of Elizabeth's reign to the reign of Charles I.

Gilbert's scheme for a voyage eventually fell through; but the interest it had awakened lived on, and was instrumental in promoting the first expedition under Martin Frobisher. Among the many adventurers who furnished the necessary backing for this enterprise were such prominent men as William Cecil (Lord Burghley), Secretary Walsingham, Anthony Jenkinson, the Earls of Sussex, Warwick and Leicester, and a man who became the mainspring of Frobisher's three voyages, Michael Lok. Lok, who deserves special notice because of the prominent part he took in Arctic exploration, was born in 1532. He travelled for over thirty years throughout Christendom, and also made several voyages to the Levant as captain of a merchant vessel. His residence in Spain and Portugal opened his eyes to the great wealth that was coming in from America, and especially was he impressed, while in those countries, by the possibilities of Oriental trade. Returning to England filled with a desire to see his country enrich herself with a share of this profitable business, Lok became one of the prime movers in the search for the northern passage. His practical experience in navigation, his studies in the science of geography, and his knowledge of many languages eminently fitted him for the work he was about to undertake. It was at this time that he met Frobisher and became his enthusiastic supporter.

Martin Frobisher was born in 1539. He was sent while still a youth to his uncle, Sir John York, who instilled into his mind a love for the sea. He did not remain long at home, however, for his adventurous spirit led him, while still a lad, to embark in two voyages to the coast of Guinea. For twenty years after this he held commissions under Queen Elizabeth, the Prince of Orange and the French Cardinal Chastillon, and sometimes roved the sea without commission or license. Though threatened with arrest on several occasions for his none too legal activities, he continued

to enjoy the favour of the Court, for his courage and high quality of seamanship won him admiration. Long before his first expedition Frobisher had discussed the possibilities of the Northwest Passage with his friends and had expressed the hope that some day he might undertake its discovery; but lack of funds always prevented him.¹⁵ His opportunity came at last when a group of merchants offered to finance the enterprise. At this juncture, however, the government began to take an active interest in the scheme. Frobisher was sent with a letter from the Queen to the Muscovy Company informing them that, as twenty years had elapsed since their first enterprise under Willoughby, they should either make a fresh attempt to find a route to Cathay or relinquish their rights to the northern passage to some one willing to do so. An unfavourable answer to this letter drew from the Queen a second communication ordering the Company to grant Frobisher a license if they would not undertake the business themselves. Accordingly, a permit was issued in February, 1575, to Lok, Frobisher and other adventurers.¹⁶ Preparations were now begun, and many other persons, among whom were Gilbert and Dr. John Dee, were urged to join in the undertaking.

Frobisher, after considerable delay, collected in the spring of 1576 a small fleet consisting of two barks, the *Gabriel* and the *Michael*, and to these was added a pinnace. He weighed anchor on the fifteenth of June, "and sailing northwest from England upon the 11 of July he had sight of a high and ragged land, which he judged to be Frisland (whereof some authors have made mention) but durst not approach the same by reason of the great store of ice that lay alongst the coast, and the great mists that trouble them not a little." He was now off the coast of Greenland, and here a double misfortune befell him in the loss of the pinnace and the desertion of the *Michael*, which returned home

to report him as lost at sea. Left alone with the *Gabriel*, he sailed to the southern part of Baffin Land (a region later called *Meta Incognita* by the Queen), an immense island lying west of Greenland. The land first seen by him was not Baffin Land proper, but an island near the coast which Frobisher called Queen Elizabeth's Foreland, and which later became known as Resolution Island. Turning northward and rounding this island, he found himself at the entrance of a deep gulf, known to-day as Frobisher Bay, which runs in a westerly direction for about two hundred miles. Nothing could have been more deceptive to Frobisher, for the bay has all the appearance of a long and comparatively narrow strait. George Best, the historian of the voyage, thus describes Frobisher's impressions of the gulf: "He determined to make proof of this place, to see how far that gut [strait] had continuance, and whether he might carry himself through the same into some open sea on the back side, whereof he conceived no small hope, and so entered the same the one-and-twentieth of July, and passed above fifty leagues therein, as he reported, having upon either hand a great main or continent. And that land upon his right hand as he sailed westward he judged to be the continent of Asia, and there to be divided from the firm [mainland] of America, which lieth upon the left hand over against the same. This place he named after his name Frobisher's Straits, like as Magellan at the southwest end of the world having discovered the passage to the South Sea (where America is divided from the continent of that land which lieth under the South Pole), and called the same Straits, Magellan Straits. After he had passed 60 leagues into this aforesaid strait, he went ashore, and found signs where fire had been made."¹⁷ On landing to explore the land he had discovered, Frobisher chanced to find a peculiar formation of rock of the colour and nature of sea coal, with little appear-

ance of value, but, as it turned out, fraught with great importance for the future of his expeditions. In an unlucky moment he ordered a quantity of the mineral to be loaded on his ships, and then gave the order to return to England.

The results of the voyage were pleasing to the adventurers, for their captain was able to give them reasonable assurance that he had located a passage; but the enthusiasm for this discovery soon paled before the frenzy roused by the report that he had found gold, for on one occasion a quantity of the stone the colour of sea coal, gathered by chance on the shores of *Meta Incognita*, happened to be thrown into a fire, where it was presently reduced to a small residue which had the appearance of gold. This was examined by an expert and pronounced genuine. Hereafter there was no lack of funds to equip the enterprises of Frobisher, metamorphosed into gold-seeking ventures by the hand of Providence. Secretary Walsingham, though at first sceptical, became convinced of the existence of gold in the newly found regions from the samples brought back by Frobisher. Experts, it seemed, had differed as to the quality of the metal; one pronounced it gold, another silver, and a third, more intelligent than the others, declared that he found nothing; but the Secretary clinched the matter by submitting a sample to an expert in whom he had great confidence, and the man reported the substance to be a metal of great value. As a result of all this excitement a conference was held for the purpose of organising a second expedition under Frobisher, and the Queen was urged to give her instructions for the arrangements in secret in order to prevent foreign princes from learning the true nature of the venture.

In answer to a petition presented by the adventurers for their incorporation at an early date—for they were now all agog for immediate action—the Queen issued a charter to the Cathay Company (1577), appointing Michael Lok its

governor and Frobisher its high admiral. The company was granted a monopoly of trade in the northwest and jurisdiction over lands in that locality; it could also send expeditions in any direction it might choose, save to the northeast, where the Muscovy Company claimed priority.¹⁸ The second expedition of Frobisher which the company now organised had two objects in view: the first and principal one was the acquisition of the ore supposed to contain gold; the second, which had for the time being sunk into minor importance, was the discovery of the passage. Frobisher was ordered to place the miners, who were to form the major part of his personnel, in suitable quarters on *Meta Incognita*, and then to proceed with his flagship for the discovery of the South Sea, but he must not go so far as to be unable to return home with the other vessels of his fleet. In case the miners did not produce sufficient ore he was to take two ships and go to Cathay, where a profitable trade might offset the failure of the mining enterprise.¹⁹ A list of subscribers to the second voyage shows many eminent persons, among whom may be numbered the Queen, members of the Privy Council, and several distinguished noblemen. Yet even so, money for the enterprise evidently did not come forth with sufficient alacrity, for the Lord Mayor of London was advised by the government, after the expedition had sailed, that when a voyage was undertaken to Cathay, in which the Queen and her Council were adventurers, he should bring pressure to bear on the merchants to induce them to help finance the enterprise.²⁰

Frobisher sailed with his three vessels, the *Gabriel*, the *Michael* and the *Ayde*, from Harwich on May thirty-first, 1577, and reached Hall's Island on the north side of Frobisher Bay on the seventeenth of July. The narrative of the second voyage, written by George Best, one of Frobisher's lieutenants, is full of interesting information regard-

ing encounters with the Eskimos and the search for precious ore, but these matters are not pertinent to our subject. Frobisher wisely concluded that the efforts to obtain the mineral would require too much attention to allow him to wander off in search of the strait, so he remained in the vicinity to await results. At last the mining operations, if one can dignify them by such a name, having proved successful, he determined to return to England without attempting the secondary purpose of the expedition. He brought back with him this time a cargo estimated at £100,000.

With feverish haste the adventurers set to work to refine their ore; for the voyage so far had lost considerable money, the assessments had not proved sufficient for the expenses, and the crews were left with their wages in arrears. But thanks to the efforts of Michael Lok, who advanced sums from his own purse, these difficulties were overcome for the time being. Meanwhile attempts to extract precious metals did not meet with gratifying success, for the essayers differed on the value of the resulting products and rendered opinions ranging from £40 per ton to absolute zero. Yet despite this warning, the optimistic among the adventurers, and there seems to have been many of them, decided on a third voyage, to be made this time on a larger scale than the first two, for in addition to the opportunity of finding gold in the newly discovered regions, a rumour had gone abroad that "the hope of a passage to Cathay, by this last voyage [was] greatly increased." So sanguine were the adventurers in their expectations of finding gold from the trash brought back to them in the two previous voyages that they made arrangements to carry on permanent mining operations, and for this purpose they took into consideration a plan to provide a colony of one hundred men to inhabit *Meta Incognita*.²¹

The instructions given Frobisher for his third voyage are

voluminous and precise. They cover principally the chief object of the expedition, namely: the settlement of the colony of miners who were to devote their time to the operations connected with the production of the required ore. But the search for the passage was not omitted from the instructions, though it was treated as of secondary importance. "We will then," said the Queen, "if leisure and time will permit the same that you with the two barks shall repair towards the place where the first year you lost your men, as well to search for mines there as to discover 50 or 100 leagues further westward from that place as the opening of the strait by water will allow, as you may be certain that you are entered into the South Sea commonly called *Mare di Sun* [*Sur*]. And in your passage to learn all that you can in all things, and take perfect notes thereof, not tarrying long from your ships and workmen, but that you may be able to return homewards with them in due time." ²²

The fleet, consisting of fifteen vessels, gathered at Harwich and sailed from there May 31, 1578. They reached Greenland on the twentieth of June, whence they steered for the Queen's Foreland at the entrance to Frobisher Bay, but snow, ice and fog now surrounded them until, baffled by the weather, they lost their bearings and were carried into the strange waters of Hudson Strait. A portion of the fleet sailed sixty leagues in this passage having land on the star-board side and open water before them. Frobisher, though he knew that this was not his former strait, dissembled his opinions on the subject in order to quiet the crew, and insisted on going forward to make further discovery. He believed, as he said later, that if he had not been hampered by the heavily laden vessels of his fleet, he could have reached the South Sea through this strait. The following reasons are given by George Best for this opinion. The farther west they sailed the wider the passage became, and

the greater probability there seemed to be of its continuance. There was also a strong indraft or current setting towards the west, a condition which, as Gilbert had pointed out, was presumptive evidence of an opening to the Western Sea. Pieces of wreckage from the *Dennis*, a vessel lost at the entrance of Frobisher Bay, were found far to the westward of that point, and this was due, so Best believed, to a current and not to the tide, as the latter flows backward as well as forward, and could not carry the driftwood so far in one direction. "For," said Best, "if the same had been brought thither by the tide of [the] flood, look [no matter] how far in the said flood had carried it, the ebb would have carried it as far back again." The conclusion is, then, that a strong westerly current moved through the passage irrespective of the tides, and as further proof of this Best points to the tide which, as he learned from observation, ran flood for nine hours and ebb for only three, a condition which could not exist if there were no current, for tides in other parts of the world flow and ebb for six hours each way. The entire line of reasoning is based on the popular theory of the water flowing around the earth.

There was further a curious misapprehension regarding a connection between Hudson Strait and Frobisher Bay which Best tells us was widely believed by members of the crew who claimed to have discovered it. "Our men," says Best, "that sailed furthest in the same mistaken straits [Hudson Strait] (having the main land upon their starboard side), affirm that they have met with the outlet or passage of water which cometh through Frobisher's Straits, and followeth as all one into this passage. Some of our company also affirm that they had sight of a continent upon their larboard [left] side, being 60 leagues within the supposed straits: howbeit except certain islands in the entrance hereof, we could make [out] no part perfect thereof."

The expedition met with many difficulties; storms, ice and fog scattered the vessels, driving some in one direction, others in another, while heavy weather prevented observations from being taken, and made it very difficult to distinguish landmarks. By dint of perseverance the fleet was finally assembled in Frobisher Bay, where a supply of ore was taken on board. As the season was now growing late it was found impossible to carry out the original plans of founding a settlement of miners, for the materials brought for the houses were damaged in transit, and the carpenters reported that it would take eight or nine weeks to construct a suitable habitation. Orders were therefore given to return home, and the last day of August the fleet set sail for England.

On the return of Frobisher financial troubles began anew. The ore he brought back with him was appraised at its true value and at last pronounced worthless. Moreover the adventurers had failed to pay their subscriptions in full, and to meet the deficiency thus occasioned Lok had been commissioned to collect the money, and to call on the Lord Mayor for assistance in collecting it, if necessary. To make matters worse, dissensions now broke out between Lok and Frobisher in which the former charged the commander with wilful neglect in failing to bring back on his second and third voyages the valuable ores he had found on his first. To this was also added a complaint of his failure to find the passage. One cannot blame Lok for his bitterness. The man was public spirited; he had advanced from his own purse huge sums for the furthering of an expedition which he believed would redound to the glory of England. He should be acquitted of any suspicion of mercenary motives, for he helped finance the first voyage before the possibility of obtaining gold was known; and, although a direct passage to Asia, it was thought, would be profitable to those

who could monopolise it, there is no doubt that Lok was actuated primarily by scientific interest. Because of the failure of the expeditions the unfortunate man was obliged to tender to the Privy Council a petition for relief, in which he set forth the pitiful fact that his losses had left his wife and children without support. Later we find him petitioning for release from the Fleet, where he had been confined for a debt of £200, incurred by the purchase of a ship for Frobisher's last voyage. Lok was released, and though still hounded, kept up his interest in the Northwest Passage, though, of course, he took no part in subsequent expeditions. He died about 1615 at a ripe old age.

Frobisher fared better than Lok. Save for the disappointment he caused the Court and his backers through failure to bring back gold or make his way to Cathay, his reputation as a discoverer does not appear to have suffered. His wife seems to have been the only creditor to annoy him, but as we know nothing of this unpleasantness beyond the lady's petition for redress, the two probably became reconciled. Frobisher did not abandon his interest in the passage. There are documents in existence telling of a projected expedition to be commanded by him, which presumably had—though specific evidence to that effect is wanting—the Northwest Passage as an objective. Sir Francis Drake was an interested party in the venture and was willing to help Frobisher with men and money.²³ For some reason or other it did not materialise.

Frobisher's voyages to Baffin Land and the discoveries he made there exercised an influence on the geographers of his time far out of proportion to their intrinsic value; indeed, their influence was greater than those of his successor, John Davis, whose discovery of the strait that bears his name and of Baffin's Bay was, at any rate, a step in the right direction, and not a blind lead into a *cul-de-sac*. True,

Frobisher sailed into Hudson Strait, but his description of it was not such as to induce later explorers to enter it in preference to Frobisher Bay. If we turn to the interpretation of Frobisher's discoveries on current maps, the reason for his influence is apparent, for his strait is shown as the middle section of a very large passage, partially blocked by islands representing *Meta Incognita*. By glancing at the map of *Meta Incognita* in Best's *Discourse* we can readily see the promising outlook it gave to persons in England. The peninsula of Labrador projecting northward to the "Mistaken Straits," and sloping in a southerly direction on its western side, gave promise of a short route to the South Sea. It is not surprising, then, that another series of voyages was undertaken to this locality during the next decade.

While Frobisher was engaged in his work of exploration Humphrey Gilbert who, as we have seen, was among the first to advocate a search for the Northwest Passage, was not idle. Undaunted by his failure to secure a charter for this purpose, he renewed his efforts later and was rewarded by a patent granted him by the Queen on June 11, 1578.²⁴ This patent says nothing in regard to a northwest passage; it deals entirely with the matter of colonisation, such as the privileges granted to those establishing a colony, and the powers of government entrusted to the patentees. Permission is also given to take British subjects from England for the purpose of making a settlement abroad. Gilbert organised an expedition and left England in November, 1578, for a destination which is not precisely known; but it is probable, considering his great interest in the passage, that he steered for the northern coast of America. Owing to a dissension which broke out among those who had embarked with him, he returned to England after a cruise of a few months. A second attempt, this time to found a colony

in Newfoundland, was also unsuccessful, and Gilbert was lost at sea on the homeward voyage.

In the meantime Sir Francis Drake, in 1577, started on his famous cruise around the world, the first circumnavigation of the globe accomplished by an Englishman. Drake was unquestionably interested in a northwest passage. It was his purpose on this voyage to seek its western entrance in the Pacific Ocean instead of its eastern terminus in the Atlantic, as had been done heretofore, and by sailing through it to encompass completely the American Continents. On the outward voyage he passed through the Strait of Magellan, and, ascending the western side of South America, plundering as he went, he reached a higher latitude than had been attained by any one up to that time. His farthest north is believed to be the forty-eighth parallel. Francis Fletcher, chaplain of the expedition, who was privy to his commander's intentions, comments thus on the attempt to reach a strait: "Considering also that the time of the year now drew on wherein we must attempt, or of necessity wholly give over that action, which chiefly our general had determined, namely, the discovery of what passage there was to be found about the northern parts of America, from the South Sea, into our own ocean (which being once discovered and made known to be navigable, we should not only do our country a good and notable service, but we also ourselves should have a nearer cut and passage home; where otherwise, we were to make a very long and tedious voyage of it, which would hardly agree with our good liking, we having been so long from home already, and so much of our strength separated from us), which could not at all be done if the opportunity of time were now neglected: we therefore all of us willingly harkened and consented to our general's advice, which was first to seek out some convenient place wherein to trim our ship, and store ourselves

with wood and water and other provisions as we could get, and thenceforward to hasten on our intended journey for the discovery of the said passage, through which we might with joy return to our longed homes.”²⁵

Drake, when he had reached the forty-eighth parallel, found that he could proceed no farther, owing to the intense cold. The cause for this low temperature was charged to the proximity of Asia to America—if the two did not actually join—which brought, so it was believed, a chain of snow-capped mountains in the path of the north wind. “And also from these reasons we conjecture,” continues Fletcher, “that either there is no passage at all through these northern coasts (which is most likely), or if there be, that yet it is unnavigable. Add hereunto, that though we searched the coast diligently, even unto the 48 deg., yet found we not the land to trend so much as one point in any place towards the east, but rather running on continually northwest, as if it went directly to meet with Asia; and even in that height, when we had a frank [favourable] wind to have carried us through, had there been a passage, yet we had a smooth and calm sea, with ordinary flowing and reflowing, which could not have been had there been a fret; of which we rather infallibly concluded than conjectured, that there was none.” Unable to pierce the continental barrier, Drake then turned his vessel westward and, sailing slowly around the globe, reached England in November, 1580; but the unfavourable reports he brought back regarding the passage in no way deterred those at home from again attempting its discovery.

The principal actors in the Frobisher expeditions now pass from the scene, and their places are taken by a new group of men, as enthusiastic and able as Frobisher and Michael Lok. When these men, the adventurers who were to finance Davis's voyages, began to deliberate on the advisability of

again undertaking the search, they had before them the first writings of a man who from now on occupies a prominent position in the narrative of Elizabethan exploration. The Reverend Richard Hakluyt, for such was this man's name, was born about 1552. While still a boy at Westminster, he became interested in geography and devoted his time to studying the subject, with special reference to travel and adventure. His enthusiasm for these activities led him to take up his pen and compile a collection of various narratives of travel that became the leading authority on exploration in the Elizabethan period. His first work was the *Divers Voyages touching the Discovery of America*, which was published in 1582 and secured for its author the patronage of Lord Howard of Effingham. Hakluyt journeyed to Paris, where he pursued a course of intensive study on his favourite topics and gathered together material which he embodied in a book called *A Particular Discourse concerning Western Discoveries*, published in 1584. Returning to England in 1588, he launched his *Principal Navigations* the following year. Ten years later a second edition of this work, revised and enlarged, saw light in three volumes. Hakluyt appears to us as a man whose contributions to exploration were inspirational and advisory rather than active and practical. He himself went on no voyages, nor did he take part in the promotion of Davis's enterprises, for he was in Paris at the time they were undertaken; but his writings urged others to push forward the work of discovery.

Hakluyt opens his *Divers Voyages* with an *Epistle Dedicatorie*, a letter written to encourage exploration for the sake of geographical knowledge rather than for the purpose of accumulating wealth, and the author urges people to undertake the discovery of a passage for the glory of God. After this exhortation he proceeds to give his reasons for a belief in the passage, reasons with which we are now fairly familiar.

The account which Ramusio received from Sebastian Cabot describing the northern part of America as a group of islands, a map given by Verrazano to Henry VIII, and preserved by Michael Lok, the reports of Jacques Cartier, all these are included in his summation of the evidence for the passage; besides which Hakluyt mentions a report given to Jean Ribaut, the French coloniser of Florida, by the Indians, telling him of the possibility of reaching the South Sea by a twenty days' journey from their country.²⁶ Strange to say, he draws comfort from the voyage of Sir Francis Drake, although, as we have seen, Drake himself asserted the improbability of a passage—a typical example of what the will to believe will do with the most unpromising material. Hakluyt also quotes the following letter from Gerard Mercator to his son, Rumold, giving the great geographer's reasons for his belief in a passage on which he (Hakluyt), of course, placed great reliance: "You write (saith he [Gerard] to his son) great matters, though very briefly, of the new discovery of Frobisher, which I wonder was never those many years heretofore attempted. For there is no doubt but that there is a straight and short way open into the west, even unto Cathay. Into which kingdom, if they take their course aright, they shall gather the most noble merchandise of all the world, and shall make the name of Christ to be known unto many idolatrous and heathen people."²⁷

Hakluyt's most influential work on colonisation and exploration is the *Discourse on Western Planting*, compiled in 1584 for the purpose of urging on the Queen the wisdom of western expansion and discovery. It was written at the request of Sir Walter Raleigh, who had just obtained a charter and was about to undertake the planting of a settlement, but who felt that a plantation of sufficient size to be of service to England would be too great an enterprise for a

private purse, especially his own. Permanent colonisation is, of course, the principal theme of the book, and the benefits accruing from such an undertaking are set forth at great length and with much precision. A chapter, however, is devoted to the discovery of a passage.²⁸ The reasons given by Hakluyt in this work for the existence of a strait are the standard ones with which the reader is already familiar, hence it is unnecessary to discuss them. The book deserves notice, however, as it exercised a great influence on the policy of colonisation that began in Elizabeth's reign.

Another work of similar import is Sir George Peckham's pamphlet (1583), based on the abortive attempt of Sir Humphrey Gilbert to plant a colony on the shores of Newfoundland. It casts only a passing glance at "the great hope and likelihood of a passage beyond the Grand Bay [Gulf of Newfoundland] into the South Seas, confirmed by sundry authors to be found leading to Cathay, the Moluccas and Spiceries, whereby may ensue as general a benefit to the realm, or greater than yet hath been spoken of, without either such charges, or other inconveniences, as by the tedious tract of time and peril which the ordinary passage to those parts at this day doth minister."²⁹ But the value of the pamphlet lies in its picture of the change taking place in England at this time in regard to America. Formerly the American Continent had been looked upon as a land of no particular value, stretching across the route to Asia and forming a stumbling block in the pathway of England's commercial development; but now men began to realise the possibility of developing the continent which was close at hand, and which offered a surer, if slower, means of enrichment than the search for a supposititious passage leading to the wealth of the Far East. From this time on the merchant adventurers were divided into two camps: those under the leadership of John Davis, Dr. Dee, the mathematician,

and Adrian Gilbert, who still believed in the passage, and those under men like Sir Walter Raleigh and Humphrey Gilbert, who undertook voyages of colonisation and relegated discovery to a secondary place. For a while these men appear to tread the same path, but their routes soon diverge and they drift farther and farther apart. It is with the first group that we shall deal at present.

At this time a change was also taking place in the position of England's foreign trade. England had been accustomed to purchase a large amount of Oriental goods from Portuguese merchants, and also from the Dutch who, in turn, bought them from the Portuguese. The attitude of Spain towards England began to alter, after the reign of Mary, from one of friendship to one of hostility. The Spanish King, angered at his loss of the Dutch provinces, found it possible to injure the business of these prosperous communities, and incidentally to aggrandise his kingdom, by annexing the crown of Portugal, to which he had become heir in 1580, thus depriving the Dutch, and indirectly the English, of their most important connection with the Far East. Furthermore, Spain controlled the Mediterranean Sea, and used her power to cut off commerce between England and the Levant, for the Levantine traders, like the Portuguese, were furnishing England with Asiatic goods. The demand for Oriental wares, meanwhile, had increased to the great embarrassment of the merchants who, deprived of their regular sources of merchandise, were obliged to look for some new way of getting into touch with the Far East. It was this situation that impelled the merchant classes to finance any movements which might enable them to renew business relations with Asia.

Queen Elizabeth on February 6, 1584, granted letters patent to Adrian Gilbert and his associates, among whom were Sir Walter Raleigh, John Davis and Dr. Dee. Gilbert,

as the patent runs, "hath greatly and earnestly travelled and sought, and yet doth travel and seek, and by divers means endeavoureth and laboureth, that the passage unto China and the Isles of the Moluccas, by the northwestward, northeastward, or northward, unto which part or parts of the world, none of our loyal subjects have hitherto had any traffic or trade, may be discovered, known, and frequented by the subjects of this our realm."⁸⁰ The rights and privileges of the associates to trade in these regions are then set forth in the usual tautological style. The principal object of the enterprise is clearly stated in the title, "Colleagues of the Fellowship for the Discoverie of the Northwest Passage," under which the patentees were to be organised. Raleigh, however, considered colonisation of more importance than the discovery, and for this reason he presently obtained a charter of his own under which he subsequently dispatched his numerous though unsuccessful expeditions. No evidence has been found to show that a company was organised under the patent of 1584, but it is possible that the Company of the Northwest Discovery, to which many Exeter merchants belonged in 1588, was established before that date under this charter, and directed the voyages of Davis.

By the time the patent was issued the associates had their project well in hand. Dr. Dee in his diary tells us of several meetings held during January and March, 1583, between Adrian Gilbert, John Davis and Secretary Walsingham (who with Dee were the moving spirits in the enterprise), and some merchants of Exeter and London, at which the Secretary was made "privy of the northwest passage, and all charts and rutters [sailing directions] were agreed upon in general."⁸¹ The Exeter merchants in the end endorsed the project, for at a meeting held in January, 1585, they decided not to engage in an enterprise with Sir Walter Raleigh as they were already pledged to a venture to China

with Adrian Gilbert, and they would undertake no additional risk until they had ascertained the results of the present one.³² And now "certain honourable personages and worthy gentlemen of the Court and country, with divers worshipful merchants of London and of the west country, moved with desire to advance God's glory and to seek the good of their native country, consulting together of the likelihood of the discovery of the Northwest Passage, which heretofore had been attempted, but unhappily given over by accidents unlooked for, which turned the enterprisers from their principal purpose, resolved after good deliberation, to put down their adventures to provide for necessary shipping, and a fit man to be chief conductor of this so hard an enterprise. The setting forth of this action was committed by the adventurers, especially to the care of M. William Sanderson, merchant of London, who was so forward therein, that besides his travail which was not small, he became the greatest adventurer with his purse, and commended unto the rest of the company one M. John Davis, a man very well grounded in the principles of the art of navigation, for captain and chief pilot of this exploit."³³ Under these auspices John Davis's first voyage was organised.

Davis sailed from Dartmouth on June 7, 1585, in command of two vessels, the *Sunshine* and *Moonshine*. After a short stay at Falmouth he shaped his course for Greenland, which he reached on the twentieth of July. The barren appearance of the coast induced him to call it the Land of Desolation. Turning southward, he doubled Cape Farewell, the southern extremity of Greenland, and sailed in a northwesterly direction to latitude $64^{\circ} 15'$, where he put into a harbour on the west coast of Greenland which he named Gilbert's Sound, the same harbour that now bears the Danish name of Godthaab. At this point, says Davis: "we shaped our course west-northwest, thinking thereby to pass

for China, but in the latitude of sixty-six degrees we fell with another shore, and there found another passage of twenty leagues [miles?] broad directly west with the same, which we supposed to be our hoped strait, we entered into the same thirty or forty leagues, finding it neither to widen nor straighten.”³⁴ Davis had crossed the broad strait connecting Baffin’s Bay with the Atlantic, that now bears his name, and had entered Cumberland Sound, a body of water projecting westward into Baffin Land and running parallel to Frobisher Bay, which it resembles in its main outlines, though it is considerably larger. Davis believed this to be a passage, and his opinion was shared by his subordinates. John Janes, who accompanied him on his first and third voyages, probably as a representative of William Sanderson, one of the principal backers of the expedition, since he describes himself as that gentleman’s servant, gives several reasons for this belief. “Our captain and master [Davis],” he says, “searched still for probabilities of the passage, and first found, that this place was all islands, with great sounds passing between them. Secondly, the water remained all of one colour with the main ocean without altering.” Other reasons are also given. The sailors saw whales to the westward in the bay which they thought, somewhat naïvely, must come from a western sea, since they had found none to the east. Certain fluctuations of the tide, which they considered eccentric, could only be accounted for, in their opinion, by the supposition of an opening in the west; while the increasing depth of the water which they noticed as they sailed westward was also regarded as a sure indication of the proximity of an open sea. Unfortunately the wind shifted when they were advancing up the sound, and as the season was getting late Davis decided to return home and await another opportunity the following year.

Three days after his arrival in England Davis hastened

to dispatch a letter to Sir Francis Walsingham with the joyful news that the strait had at last been found. "Right honourable," he writes, "most dutifully craving pardon for this my rash boldness, I am hereby, according to my duty, to signify unto your honour that the northwest passage is a matter of nothing doubtful, but at any time almost to be passed, the sea navigable, void of ice, the air tolerable, and the waters very deep."³⁵ The assurance with which Davis presented his discovery took the merchant adventurers by storm. Within six months the sum of eleven hundred and seventy-five pounds was raised, chiefly by the merchants of Exeter who had financed the first voyage, but also by those of Totnes and London. The directions given Davis for the conduct of his second expedition were, so he tells us: "to search these straits until we found the same to fall into another sea upon the west side of this part of America, . . . for then it was not to be doubted but shipping with trade might safely be conveyed to China and the parts of Asia."

Davis sailed from Dartmouth on May 7, 1586, with a fleet of four vessels, the *Sunshine*, *Moonshine*, *Mermayd* and *North Star*, and reached latitude 60° a month later. Here the fleet was divided, Davis sending the *Sunshine* and *North Star* to seek a passage up the eastern coast of Greenland, whilst he with the two remaining vessels made his way to Gilbert's Sound on the west coast, where he remained for some little time. Davis now decided to send home the *Mermayd* while he proceeded in the *Moonshine* on the voyage of discovery. Impelled by a desire not to fail William Sanderson, who had advanced so much money for the discovery of the passage, and dreading the criticism of Secretary Walsingham, he made his way up the coast to latitude 66° 33', where he revictualled the *Moonshine* for the prospective journey, and dispatched the *Mermayd* back to England. He now set off on his work of exploration in

earnest. Crossing Davis Strait, he reached Exeter Sound on the coast of Baffin Land, due west from his harbour in Greenland. He paused but a moment here. "The fifteenth day [of August]," he says, "at three o'clock in the morning, we departed from this land [going] to the south, and the eighteenth of August we discovered land northwest from us in the morning, being a very fair promontory, in latitude 65 degrees, having no land on the south. Here we had great hope of a through passage."³⁶ Though he had arrived at the entrance to Cumberland Sound, the supposed passage he had explored the preceding year, Davis does not seem to have recognised it. He continued his course southward, merely noting that, as he could see nothing but islands, his hopes of a passage were thereby increased, and as he sailed on "to discover the coast, whereby the passage may be, through God's mercy, found," he passed Frobisher Bay and Hudson Strait, both of which he might well have explored, and landed in a fair harbour on the coast of Labrador in latitude 56°. Into this he sailed ten leagues.³⁷ Then continuing farther south he presently reached a place where, he says, "we had a perfect hope of the passage, finding a mighty great sea passing between two lands west. The south land, to our judgement, being nothing but isles, we greatly desired to go into this sea, but the wind was directly against us." This place is probably Hamilton Inlet. Davis having now sailed down the entire coast from the entrance of Baffin's Bay to Hamilton Inlet, or its vicinity, without accomplishing his purpose of getting through to the Western Sea, decided to abandon the project, for this year at any rate, and to return home. As a peace offering to the disappointed adventurers he loaded his vessel with cod and then set his course for England.

On reaching home he made an immediate report to Secretary Walsingham, who in turn commanded him to present

to the Lord Treasurer some of the cod he had so wisely brought; and that dignitary, when he had sampled the gastronomic qualities of the fish, ordered Davis to continue his explorations. The merchant adventurers, however, were not so sanguine; the majority of those from London and many from the western counties withdrew from the enterprise, but Sanderson and Walsingham gallantly stuck to their guns.

The following year (1587) a third expedition was undertaken. It was proposed to make it self-supporting by the ingenious plan of detailing two vessels from the fleet to fish, while the third, under Davis, took up the work of exploration. The ships left Dartmouth on May nineteenth and proceeded to Greenland. Arriving at Gilbert's Bay on the western coast they parted company, two going to fish off the coast of Labrador, while Davis in the *Helene* made his way northward. His route lay up the western shore of Greenland to latitude $72^{\circ} 12'$, where he discovered a promontory which he named Hope Sanderson. At this point, seeing the water to the west clear of ice, he turned his vessel in that direction and sailed for a distance of forty leagues, until a field of ice blocked his way and forced him back to Greenland. Cruising south for a short distance, he crossed over to the western side of Davis Strait and sailed up Cumberland Sound for sixty leagues to a point where he found, at last, that his much-vaunted strait was but a gulf closed at its western end against all further passage. There was nothing to do but conceal his chagrin as best he might, and to turn southward in the hope of finding some outlet that he had overlooked the previous year. Thus he coasted by Hudson Strait, making no attempt to explore it, and passed down the shore of Labrador to $52^{\circ} 40'$, where, failing to find the fishing vessels he was to meet there, he spread his sails for home.

Returned to England, Davis at once wrote his patron, Sanderson, a letter in which he speaks of the probability of a passage. "I have been in 73 degrees," he says, "finding the sea all open, and forty leagues between land and land. The passage is most probable, the execution easy, as at my coming you shall fully know." Davis's enthusiasm and certainty are pardonable, for he had entered the great basin known as Baffin's Bay, where he had been stopped, not by a barrier of land, but by a field of ice that might, under favourable weather conditions, open up a passage to the west. As evidence that his enthusiasm and confidence in the outcome of the scheme were shared by some of his backers, plans were set on foot for a fourth expedition shortly after his return. At a meeting of the Exeter merchants held in December, 1587, the matter was carefully discussed, and a committee was appointed to examine the records of the voyages with a view to ascertaining what prospects they contained of finding the passage. Sanderson still had faith in the outcome of the undertaking and drew up a paper for the purpose of encouraging another attempt, a work in which he was associated with Sir Thomas Smith who afterwards played such an important part in the colonisation of Virginia. The reports prepared by these gentlemen were presented to the Exeter guild in June, 1588; but the merchants failed to share the enthusiasm of their committee, for in the expeditions they had already financed they had risked much and gained little. To them the solution of the problem of the Northwest Passage was as remote as ever, and they decided to concern themselves with it no further.

Yet Davis did not despair. Deserted by the merchant adventurers who had backed him, with great faith and loyalty, it is true, he seized an opportunity to prosecute his search when Sir Thomas Cavendish sailed for the South Sea in 1591. Davis embarked on this voyage with the understand-

ing that he should be furnished with vessels to continue his search on the western side of America. He tells of his experiences on this expedition in the *Dedication* of his *Seaman's Secrets*. "I thank God," he writes, "that of late it hath been my very good chance to receive better assurance than ever before of the certainty of that passage, and such was my vehement desire for the performance thereof, that thereby I was only induced to go with M. Candish [Cavendish] in his second attempt for the South Sea, upon his constant promise unto me, that when we came back to the California [coast], I should have his pinnace with my own bark [the *Desire*] (which for that purpose went with me to my great charges) to search that northwest discovery upon the back parts of America, but God hath otherwise disposed our purposes in his divine judgements, for M. Candish being half way through the Straits of Magellan, and impatient of the tempestuous furiousness of that place, having all his ships and company with him, returned for Brazil, by the authority of his command, when with a leading wind we might have passed the same, and returning more than 80 leagues toward Brazil, myself being in his ship named the *Desire*, without boat, oars, sails, cables, cordage, victuals or health of my company sufficient for that attempt was separated in a fret [storm] of weather, and forced to seek the next shore for my relief."⁸⁸

Davis summed up his opinions regarding the existence of a passage, opinions based on information acquired from hearsay and personal experience, in *The Worlde's Hydrographical Description* published in 1595.⁸⁹ In this work he attempts to prove America to be an island. He shows from known geographical facts that in the Eastern Hemisphere Europe, Asia and Africa are all conjoined into one mighty continent, a continent far removed from the American Continents in the Western Hemisphere. The distance between

America and Eurasia is greater across the Pacific, as has been shown by Drake, than across the Atlantic; and since there is no connection between the two continents on the Atlantic side, there is less likelihood of there being any in the northern part of the Pacific. The navigations of Hawkins throw considerable light on the subject, says Davis, and so do those of Drake, who sailed northward along the western coast of America until he came to the latitude of Newfoundland, at which point he demonstrated the immense distance between that continent and Asia. With the proofs of a passage which Davis deduced from his own experiences we need not concern ourselves, for they are based on the three voyages we have just described, but an important item in the thesis is the stress he lays on the certainty of finding open water near the Pole. The theory of an open polar sea, and by this is meant a sea unobstructed by ice floes and not merely rifts in a field of ice, received serious attention during this period; it crops up from time to time in the writings of those who, like Robert Thorne, believed it possible to find a route to Asia by sailing directly over the Pole, instead of searching for a passage through the northeastern portion of the American Continent. Davis, in fact, did navigate well into Baffin's Bay, and in modern times Commander Peary anchored the *Roosevelt* beyond the gulf off the northern coast of Grant's Land, but explorers have long since proved that the ocean is not navigable for practical purposes in these high latitudes. Davis closes his book with a summary of the advantages that would accrue to England by the discovery of the passage.

The voyages of Davis did not meet with the attention they merited, although the explorer had opened up a lead far more promising than Frobisher Bay. Not a single publication of his travels is registered at Stationers Hall, nor do we find any notices of them in the works of Speed, or Stow,

or Camden. They are included, however, in the *Principal Navigations of Hakluyt*, 1589. As compared to Frobisher, Davis receives scant notice from his contemporaries. Perhaps this was because Frobisher brought home what was believed to be gold, an incident that naturally excited intense interest in England, or possibly because Frobisher's expeditions were financed in part by the Queen, while Davis was obliged to rely on private support,—facts which brought Frobisher into official notice and consequently into national prominence.

The large map prepared by Davis to illustrate his discoveries has been lost, but fortunately his work is depicted on the Molyneux Globe and on the map of the world by Edward Wright. The globe in question is the work of Emeric Molyneux, a protégé of William Sanderson; hence we see the influence of Davis. It was completed in 1592 and is said to be the first ever produced in England. Wright on his map carefully reproduced the results of Davis's voyages, indeed, the sketch is believed to have been copied in part from Davis's lost chart.⁴⁰ Davis Strait, Baffin's Bay, Greenland with the various points touched by the explorer on his journey up the coast, and Baffin Land with the bays and inlets described by him, are all shown on this map. Hudson Strait is not depicted as a strait, but rather as a gulf where Davis noticed a furious overfall. Thus the coast, according to the map, is blocked in the westerly direction, and the only hope of a passage is to the north through Davis Strait. In delineating North America the author is careful to show the coastline only so far as it had been surveyed at the time, and, unlike most geographers, he makes no attempt to draw imaginary straits to the Western Sea on the authority of theoretical reasoning or legendary voyages. Along the Atlantic coast Labrador is extended northward in an unbroken line to a point slightly above Cumberland Sound, no

attention, as we have said, being paid to Hudson Strait as such. Here the continent is separated from Greenland by *Fretum Davis*. In delineating the reputed Frobisher's Strait, Wright seems to have gone far astray, for he shows *Meta Incognita* as the southern part of Greenland and the strait itself as a channel separating that land from an island south of it.

A route to the Western Sea had now been discovered, according to contemporary geographers. The old idea that America was a part of Asia had disappeared. Glancing at the maps published in the last decade of the sixteenth century, one is struck by the tendency which the cartographers have to show a channel around the northern extremity of America, and a connection between it and the Pacific through the strait called Anian; but it is necessary to warn the reader that this channel is not to be taken for Hudson Strait as we know it to-day, for while Frobisher sailed some distance into it, he regarded it merely as a southern branch of his own passage. The true significance of Hudson Strait was not known until later, and the geographers of this period, in showing the northern water routes, were merely trying to give an interpretation of the discoveries of Frobisher and Davis. The voyages of these two men may be said to have changed the search for a passage from a speculative proposition to what was considered to be a certainty; for before they began their labours the passage had been a matter of guesswork, and cartographers attempting to show a connection between the two oceans were drawing on their imaginations; but now there was supposedly definite material on which to proceed.

CHAPTER III

THE SEARCH FOR THE PASSAGE THROUGH HUDSON BAY

Cortez's interest in a strait.—Strait of Anian.—Fictitious accounts of journeys through a passage.—Juan de Fuca.—English attitude towards the possibility of a passage.—Friction between the East India and the Muscovy Company.—George Weymouth's expedition.—Theories of Sir Dudley Digges.—Knight's voyage.—Supposed delineation of Hudson Bay on sixteenth century maps.—Voyages of Henry Hudson.—Hudson Bay opens up new possibilities.—Opinion of Admiral Monson.—The Northwest Company.—Thomas Button explores the bay.—Voyages of William Baffin.—The expeditions of Luke Foxe and William James.

WE have now traced the efforts made by various nations during the sixteenth century to discover the Northwest Passage, but before taking up the narrative again and telling of the many attempts made by English during the reigns of James I and Charles I, it will be necessary to give the reader a glimpse of the work of exploration carried out by the Spaniards along the western coast of America, as these voyages, whether fictitious or authentic, exercised considerable influence on the English sea captains of the seventeenth century. For, as the Spaniards sailed slowly up the western shore, they gradually dispelled the idea that America and Asia were one—a work in which they were aided by Francis Drake—and belief in the probability of a passage was thereby greatly augmented.

Hernando Cortez, during his governorship of Mexico, evinced considerable interest in the possibilities of a strait somewhere in the northern part of his province, and endeavoured to impress upon the Spanish Court the value of its discovery. He wrote to the Emperor, Charles V, in October,

1524, urging that some steps be taken to locate the strait. "I saw," he writes, "that nothing more remained for me to do but to learn the secret of the coast which is yet to be explored between Rio Pánuco and Florida . . . and thence the coast of the said Florida northward to Baccalaos; for it is deemed certain that on that coast there is a strait which passes to the South Sea." As the Gulf of Mexico and the eastern coast of Florida had already been explored by Piñeda and the emissaries of Ayllon, while Verrazano had ranged the seaboard from New Jersey to Maine, the improbability of a passage south of the St. Lawrence was evident to Charles, hence he showed little disposition to meet with Cortez's suggestions. Moreover, the voyage of Gomez in the year 1525 served to confirm the Emperor in his impressions. Cortez then turned his attention to the western coast. He led an expedition in person (1535) from Tehuantepec to La Paz on the southern extremity of the Peninsula of Lower California. Four years later he dispatched Ulloa, who penetrated into the Gulf of California as far as its head, then descending the shore of the peninsula, explored it to its southernmost tip, where he doubled the cape and ascended the western side to latitude 30° , thus establishing the peninsularity of Lower California. Governor Mendoza, who succeeded Cortez, was no less enthusiastic for discovery than his predecessor. He sent out Juan Cabrillo, whose voyage we have already described, and whose lieutenant, Ferrelo, claimed to have reached latitude 44° . This appears to be almost, if not quite, the northern limit of exploration until 1774. The voyage of Sir Francis Drake, who sailed north along the coast to about 48° , has already been discussed, and the importance of the information it disclosed regarding the breadth of the Pacific in this latitude has been emphasised.

Shortly after Drake's voyage a journey was made across

the Pacific (1584) by Francisco de Gualle, which had considerable influence on English thought about the passage, especially as it was published in Hakluyt's work and thus became widely known. De Gualle in coming from China to California comments thus on the width of the Pacific Ocean: "Running thus east, and east and by north about three hundred leagues from Japan, we found a very hollow water, with the stream running out of the north and northwest, with a full and very broad sea, without any hindrance or trouble in the way that we passed; and what wind soever blew, the sea continued all in one sort, with the same hollow water and stream, until we had passed seven hundred leagues. About two hundred leagues from the coast and land of New Spain we began to lose the said hollow sea and stream: whereby I most assuredly think and believe, that there you shall find a channel or straight passage, between the firm land of New Spain, and the countries of Asia and Tartary."¹ This story, the substance of which is embodied in an inscription on Wright's map, gave the English another valuable bit of information on the breadth of the Pacific in the higher latitudes—for Gualle claimed to have reached America at $37\frac{1}{2}^{\circ}$ —that reinforced the account of Francis Drake. Moreover, it had the advantage of adding to Drake's narrative mention of a current which flowed from the north and which, as the narrator suggests, indicated a passage between the two continents.

According to tradition, Philip III of Spain is said to have found hidden away in his dusty archives a narrative telling of certain individuals who were driven by a storm into a great bay in Newfoundland, whence after wandering about for some time they made their way to the Western Sea, reaching it at latitude 48° .² The King, intrigued by this account, dispatched Sebastian Vizcaino to explore the western coast for the purpose of finding the strait through which the

sailors had passed. Vizcaino (1603), ascending the coast of California, reached a point which he named Cape Blanco, on the forty-third parallel, and near this point his lieutenant thought he saw the large river that subsequently became known on maps as the Aguilar. The report which this explorer made of his voyage was evidently considered promising, for two different commentators expressed a belief that the strait had at last been found. Torquemada considers the river Aguilar to be one leading to a great city discovered by the Dutch, that is, he regarded it as the passage known as the Strait of Anian and which, according to current opinion, connected the North or Arctic Ocean with the South Sea. Padre Ascension with equal enthusiasm writes that this cape marks the end of California and the entrance to the Strait of Anian.

The Strait of Anian, which we have had occasion to mention more than once, is one of the curiosities of sixteenth and seventeenth century map-making, and as such deserves a little explanation at this point. It arouses interest chiefly because it resembles Bering Strait so closely, although the latter was not discovered until 1728, and also because, though it was pure guesswork, Anian happened to give an inkling of the Northwest Passage in the only location in which it could possibly be found. The Strait of Anian appears for the first time on Zaltieri's map of 1566, and it is found on charts for more than two centuries until at last it is blended with Bering. The origin of the name itself is shrouded in mystery. Sometimes the name is given to a country in Asia; sometimes to one in America; but whether applied to a strait or country it is always confined to the vicinity of Bering Strait. There was also a tradition in the eighteenth century that Cortereal named the strait after three brothers who accompanied him, a story which caused it to be called in some accounts the *Fretum Trium Fratrum*.

It was also said that Cortereal called the passage after one of his own brothers. The theory regarding Cortereal's brother may have resulted from confounding this man with an individual of the same name whose exploits are described as follows by Hakluyt: "An excellent learned man of Portingale [Portugal], of singular gravity, authority, and experience, told me very lately, that one *Anus* [John?] Cortereal, captain of the Isle of Tercera, about the year 1574, which is not above eight years past, sent a ship to discover the northwest passage of America, and that the same ship arriving on the coast of the said America, in fifty-eight degrees of latitude, found a great entrance exceeding deep and broad without all impediment of ice, into which they passed above twenty leagues, and found it always to trend toward the south, the land lying low and plain on either side; and they persuaded themselves verily that there was a way open into the South Sea."³ The name *Anus* Cortereal suggests two things: Anian the strait, and Cortereal the explorer, hence presumably arose the belief that Gaspar or Miguel Cortereal had visited the passage. The identity of *Anus* Cortereal is impossible to ascertain; he may have been a Portuguese explorer who penetrated some distance into Hudson Strait, for there were Portuguese fishermen who plied their trade off the Grand Banks, and one of them might have drifted into the strait or even into Hudson Bay. If this were so one can readily see that on entering the bay he would naturally suppose that he had reached the South Sea.

The placing of the Strait of Anian by the Spaniards, as, for example, by Torquemada, at a point so far removed from the Atlantic (that is in the vicinity of Bering Strait) was disconcerting to those who wished to discover it for the purpose of finding a shorter route to Asia; and so, as the actual location of the strait was, after all, a mere supposition based on rumour and tradition only, there was no lack of argu-

ments to refute the theories advanced by the Spaniards. Samuel Purchas, the literary successor of Hakluyt, in expressing his disbelief in the Spanish claim, charges the entire business to the duplicity of the Portuguese. "And," he reasons, "if any man think that the passage is so far [west] as the maps use[d] to express America [show it to be], running [it] out into the west: it is easily answered, that either of negligence, or over-busy diligence, maps by Portugals in the east, and Spaniards in the west, have been falsely projected. Hence that fabulous Strait of Anian, as before by Francis Guale's testimony and navigation is evident: and hence the Portugals to bring in the Moluccas, to that moiety of the world agreed upon betwixt the Spaniards and them, are thought to have much curtailed Asia, and the longitude of those islands, giving fewer degrees to them than just longitude is requisite." ⁴

The position of Spain in regard to the discovery of the Northwest Passage, especially after Drake's voyage along her American coasts, was defensive rather than offensive. The discoveries of Cortez and Pizarro had placed in her hands an immense quantity of wealth that was easy of access and readily obtainable, and thus the dream of trade with China vanished in favour of the gold and metals close at hand. Magellan's voyage had shown the immense distance between America and Cathay, and although merchantmen were sent across the vast expanse of the Pacific, trade between China and New Spain was of secondary importance. Yet Spain desired to discover the strait as a means of protection against the encroachments of the English, and for this purpose she kept strict watch on English attempts in this direction. The two countries kept a jealous eye on each other. For instance, when the records of Frobisher were translated into Spanish the Privy Council took prompt action to prevent their being sent to Spain. The Spaniards,

however, knew the English to be greatly interested in the project of opening trade with China by an all-water route. They feared the presence of English vessels in the Pacific—Drake's cruise along their coasts had given them a taste of what they might expect—and for this reason wished to preempt the strait and fortify it against seizure. Rumours of successful passages roused their fears; and their fears, once roused, embellished the rumours. During the early part of the seventeenth century so much alarm was felt by the Spaniards, lest their supremacy in South America be wrested from them by the discovery of a passage, that a junta was formed under Philip III to discourage further search on the part of Spain herself and to bring pressure on England, urging a similar policy on the part of her sovereign. The results of this action are unfortunately lost to us, but we do know that official Spain soon abandoned all attempts at discovery.⁵

Fictitious stories of the discovery of the passage were numerous, and played their part in kindling English enthusiasm for the undertaking. Juan de Ladrillero made a sworn statement in 1584 in which he told of a cruise he had made in American waters, where he had learned of the existence of a strait situated about eight hundred leagues north of Compostela on the western coast of Mexico, which led to the place where the English caught codfish. Ladrillero was willing to go and fortify this strait for Spain. A fantastic rumour is recorded by Father Salmeron in 1626, telling of a foreign pilot named Morena who had sailed through the Strait of Anian with Drake, going from the Atlantic to the Pacific, where he was left stranded on the coast. This wild tale may have been derived from a rumour of Drake's return to England by the Northwest Passage, a rumour based on the knowledge that the Englishman, after ascend-

ing the western coast, had not returned, but had reached England in safety.

A deliberate falsehood, circulated presumably for the purpose of extracting money from the unwary, is found in the story of Lorenzo Ferrer Maldonado, an impostor who evidently concocted his account with considerable care, for he gives a detailed narrative of his voyage through Anian. García de Silva, a well-known Spanish writer of the time, informs us of a meeting he had with Maldonado in Madrid in 1609, at which the latter told him that in February, 1588, he had entered the strait of Labrador, as he was pleased to call it, in latitude 60° . He sailed, so he said, in a northwesterly direction to the seventy-fifth parallel, a course which brought him to the Polar Sea. Then he turned his vessel southwesterly and cruised for seven hundred and ninety leagues, reaching the entrance of Anian at latitude 60° . The strait, he found, was fifteen leagues long and not over a quarter of a league in width, with six turns to vary the monotony of the passage and enable the traveller to view the scenery in every direction. Modern knowledge shows the impossibility of such a feat, but even if this were not so the man's subsequent actions give the case away. It seems he had other schemes which he was about to place on the market, such as a compass needle impervious to magnetic variation; furthermore, he had been convicted of forgery. The case of Maldonado is a good illustration of one of the reasons for these fictitious claims. Adventurers in needy circumstances would play on popular credulity—and this was not a difficult thing to do in days when the actual geographical conditions were unknown—in order to sell their secrets outright for money, or to secure the command of an expedition with a comfortable salary. With the discovery of the Northwest Passage as an object the job might be made to last a lifetime.

There was one spurious account of a discovery of the strait that attracted special attention in England, and gave great hope to those who were contemplating a renewal of the search. Michael Lok was living in Venice during the year 1596, where he was enjoying, let us hope, some respite from his creditors. In a letter of his, which was preserved by Purchas, he tells of meeting in Venice an old man commonly called Juan de Fuca, whose real name was Apostolos Valerianos, a native of Greece, who told him of a strait he had discovered in America. De Fuca spun an elaborate yarn. He was crossing in a Spanish ship from China to New Spain when he was seized and robbed by the English explorer, Captain Cavendish, who relieved him of sixty thousand ducats worth of goods. After this he was commissioned by the Viceroy of Mexico as pilot of a small fleet sent by Spain "to discover the Straits of Anian, along the coast of the South Sea, and to fortify in that strait, to resist the passage and proceedings of the English nation, which were feared to pass through these straits into the South Sea."⁶ This voyage was unsuccessful, and de Fuca was sent out again by the viceroy in 1592 with a caravel and a pinnace. This time the Greek was more fortunate. He coasted northward along the coast of California until he came to latitude 47° , where he found a broad inlet of the sea which he entered, sailing therein more than twenty days, steering northwest, northeast, north, east and southeast, in fact he nearly boxed the compass. His sail of twenty days brought him to what he believed to be the North Sea, and there he paused, thinking he had performed his duty. Presently he returned to Mexico, where, he says, he hoped to be rewarded by the viceroy. The reward, it seems, was not forthcoming, so after waiting for it for two years he came to Spain hoping to find his services better appreciated than they had been in Mexico. But failing to meet with a proper reception, he was now pre-

pared to come to England and lay his knowledge before the Queen, if she would furnish him with a ship and a pinnace to make the discovery for her. He also suggested that it would be an appropriate gesture on the part of the British government to reimburse him for the goods stolen by Cavendish.

De Fuca certainly never made this discovery and probably never undertook the voyage; the story has the appearance of being manufactured out of whole cloth. His yarn was, of course, easily believed at a time when accurate knowledge of northwestern America was lacking; and even when it was realised that there was no passage at the place indicated by de Fuca, many believed that the pilot had entered the strait known to-day by his name, which strait is a body of water separating British Columbia from the state of Washington, and had sailed up the eastern shore of Vancouver Island. But such an hypothesis is untenable, because the sailing directions given by de Fuca are different from those required on such a course. Moreover, the story cannot be found in any source save the one quoted, and a careful search of the Spanish archives has disclosed nothing regarding a journey by Juan de Fuca.⁷ The story, however, made an impression on Lok and caused him to write eagerly to Hakluyt, Lord Cecil and Sir Walter Raleigh begging of them a sum of money to bring de Fuca to England; but while these gentlemen approved the scheme they excused themselves from supplying the funds and left Lok to his own devices. Whereupon de Fuca, seeing his hopes vanish, started for home. Lok corresponded with him for some time, but eventually the Greek ceased to write and Lok closes the incident by telling us that he believed de Fuca had died.

England by now had reached a fork in the road where two avenues of wealth lay open to her: one, the colonisation

of North America, a vast enterprise entailing great expenditure of capital; the other the discovery of the North-west Passage, an achievement that would lead to trade with the Far East. Richard Hakluyt, although his *Western Planting* has become a classic of essays dealing with the advantages of British dominion overseas, was not blind to the benefits to be derived from Eastern trade. He published an intercepted Spanish letter telling of the great volume of business transacted in the Orient. The writer of this epistle was much impressed with the vast resources of China, with its gold, silver, pearls and silk, and he gives an account of the profitable trade which had sprung up between that country and Mexico. It takes, he says, thirteen or fourteen months to make the round trip from Mexico, and one finds that two hundred ducats' worth of Spanish goods are worth fourteen hundred in China.⁸

The English were now more than ever alive to the advantages which Oriental commerce would bring to England if only the route to Asia could be shortened by the discovery of a passage. Should this discovery be made it would be necessary, in their opinion, to establish settlements on the American Continent to be used as half-way stations on the route to Asia. Fortunately Drake had given England as good a claim to the western coast of North America as the Spanish explorers had obtained for Spain, and if this region were properly settled, it might form a valuable link between England and the East. That this scheme was in the minds of many Englishmen is evident from the following statement made by an unknown individual, who, for all we know to the contrary, may have been no less a person than Hakluyt himself: "On the backside or west of America, beyond Cape California, from 24 degrees of northerly latitude to 43 degrees (all which coast Sir Francis Drake in his voyage about the world discovered and took possession thereof for

her Majesty in 38 degrees, calling the country Nova Albion) they [Spaniards] have not one foot of actual possession, much less more northerly. And therefore in time to come they shall have no pretense of cavillation against a north-west passage, if it should please God to lay open the same.”⁹ By this exploit the English were able to lay claim to a portion of the continent, and since they could also claim a certain part of the eastern shore, thanks to Cabot and others, everything was set for the opening of commerce with Asia, the only thing left to do was to find the passage.

The lure of Eastern trade was powerful, too powerful, in fact, to permit men to await calmly the discovery of a northern passage. The southern route lay open to all, and so, shortly after the defeat of the Spanish Armada, a small fleet was equipped and sailed for the East by the Cape of Good Hope, returning presently with a cargo of Oriental goods. Merchant adventurers now turned their attention to establishing a firm line of communication with the coast of Asia, and organising trade with the Orient on a business basis. A large corporation was formed underwritten by two hundred and fifteen knights and merchants who secured a charter from the Queen in 1600. This was the famous East India Company. The adventurers were given, under this instrument, permission to trade on all continents and islands between the Strait of Magellan and Cape of Good Hope, that is on all lands washed by the Pacific and Indian Oceans. No sooner did the company receive its charter than it began to make preparations for the discovery of a northern passage in preference to the longer route around Africa or South America. In their first expedition, undertaken by the Cape of Good Hope to Java and Sumatra, they had supplied their vessels with English money, coined especially for the enterprise, and also with the foreign money current in those islands; but this proved troublesome, and besides it was con-

sidered unwise to remove bullion from the kingdom. In order to remedy these evil conditions the merchants decided on the following device: "They therefore," runs the report of the meeting, "being desirous to use the privilege to them granted, rather for the good of the commonweal of their country, than for their private benefit, and to maintain the trade of the East Indies, if it be possible by the transportation and vent of cloth, and other the native commodities of this realm, without any money at all, or else so little as may be conveniently tolerated, do resolve to attempt the discovery of a passage by seas unto the said East Indies, by the northwest through some part of America, which if they find navigable then shall they by that passage arrive in the countries of Cathay and China [there] being [in] the east parts of Asia and Africa climates of that temperature, which in all likelihood will afford a most liberal vent of English cloths and kersies to the general advancement of the traffic of merchandise of this realm of England."¹⁰

The patent object of the discovery, then, was to reach a more northerly portion of Asia, where a colder climate would create a demand for the woollen cloths of England, thus the adventurers would engage in a double trade and be relieved of the necessity of exporting coin to the detriment of the realm. For this purpose a series of resolutions was immediately passed to expedite the voyage of discovery. Members were first to be assessed a certain amount for the enterprise and they were then permitted to share in future expeditions in proportion to the sum they contributed to the initial one. The assessment was to be at the rate of twelve pence to the pound, that is, twelve pence for every pound invested in the former voyage around Africa, and as the undertaking was considered an important one, elaborate arrangements were made for compelling the members to pay their respective shares in the enterprise. Such measures were deemed neces-

sary to the success of the venture, for it was feared that this voyage, which was indeed but an experiment, would be unpopular in view of the failure of previous attempts at the Northwest Passage. To the problem of the voyage was also added the selection of a leader, but fortunately an experienced seaman, one George Weymouth, came forward and volunteered to lead the expedition.¹¹ A vote was finally taken on the project and it was decided at a meeting held in August, 1601, to attempt the passage. Three weeks later the General Court closed with Weymouth as commander of the expedition, under an arrangement whereby he was to receive five hundred pounds if he succeeded in making the discovery, and one hundred if he failed. The entire cost of the undertaking was estimated at three thousand pounds.

The question now arose as to the rights of the Muscovy Company to the Northwest Passage, for the charter of that organisation had granted it all lands to the northwards, northeastwards and northwestwards. This brought up a much vexed legal point which delayed matters considerably and threatened to wreck the entire business. A meeting of the East India Company, held to consider the problem, determined to confer with the Muscovy Company and to request them to give their consent to the undertaking. Unfortunately for this proposal the Muscovy people stood on their legal rights and declined to permit the East India merchants to attempt to find the passage, but they expressed a willingness to have the latter join with them in a similar enterprise, and they offered to concede rights to the passage in perpetuity to those who would assist them. The East India Company, fearing lest the Muscovy adventurers would contribute to the joint undertaking only what they felt inclined to give and would leave their partners to bear the financial brunt did not relish such an arrangement. They therefore made a counter-proposal in which they offered to

venture such sums as had already been raised, if the Muscovy Company would agree to exclude from the passage such persons as had contributed nothing to the enterprise. This offer was declined. The East India Company thereupon decided, in view of the importance which their plans had for the general welfare of English industry, to appeal to the Privy Council against the obstructionist policies of the rival company. In the meanwhile the Council had itself become restive under these delays, and now voiced a complaint that a second expedition by way of Cape of Good Hope had not yet been dispatched. The Council finally addressed letters to both companies requiring them to send representatives to a conference so that the matter could be definitely settled.¹² At a meeting the Privy Council took the Muscovy Company to task for its efforts to block a rival company while doing nothing itself, and after a thorough investigation of all claims it rendered a decision in favour of the East India Company, and the latter thereupon decided to proceed with the voyage already planned.

The rights of the Northwest having thus been adjudicated, and the proper financial arrangements being now completed, an agreement was drawn up with Captain Weymouth in April, 1602. In this contract Weymouth agreed to sail to the coast of Greenland and into that part of the seas known as Davis Strait, and to go forward by the northwest or wherever he found the passage "to lie towards the parts or kingdoms of Cathay or China or the backside of America without giving over the proceeding on his course so long," so runs the contract, "as he shall find those seas or any part thereof navigable and any possibility to make way a passage through them."¹³

Elaborate preparations were made for this undertaking; and the elaborateness served only to set forth in stronger contrast the completeness of the failure. The Queen, in

order to insure a proper welcome and necessary assistance to Weymouth when he reached Asia, wrote letters to the Emperor of Cathay to serve as introduction for the visiting Englishmen.

Weymouth set sail from Radcliff on the second day of May, 1602, to discover, as he tells us, the Northwest Passage, having in his vessels, the *Godspeed* and *Discovery*, supplies for a year and a half, for the company made ample allowance for a lengthy journey. He passed the Orkney Islands, north of England, and sighted Greenland on June eighteenth. From there he sailed northwestward leaving on his left Queen Elizabeth's Foreland, or as he calls it Warwick's Foreland, at the entrance to Frobisher Bay. Here the wind rose good and strong from the northeast, and unable to make headway against it he stood to the southward, probably sailing around the Foreland, for he speaks of it as an island; "which if it fall out to be so," as he says, "then Lumley's Inlet [Frobisher Bay] and the next southerly inlet [Hudson Strait], where the great current setteth to the west, must of necessity be one sea; which will be the greatest hope of the passage that way."¹⁴ Later, the wind shifted and Weymouth turned north again reaching latitude $63^{\circ} 53'$. Here a mutiny headed by the chaplain, the Reverend John Cartwright, broke out and forced the captain to abandon his course and to turn south. The mutineers, in presenting their case to the commander, argued that while they could winter in this northerly latitude it would be impossible to get under way again before the following May, hence they might better return to England, and make a fresh start in the spring. They magnanimously offered, however, to push through the passage at once if one could be found in more southerly latitudes, but Weymouth seeing that the situation was hopeless sailed back to England.

The wrath of the adventurers at the failure of their ex-

pedition was great. The extensive preparations of the previous spring had ended in a fiasco. They did not even get the benefit of additional information regarding the north-western seas and territories, for Weymouth could tell them nothing that they had not already learned from Davis and Frobisher. An investigation of Weymouth's conduct was set on foot, but it did little save fix the blame on the Reverend Mr. Cartwright; and as a punishment, if punishment it can be called, he was ordered to surrender a gown which the company had given him to be used when he made his appearance before the Emperor of Cathay.¹⁵ Weymouth evidently acquitted himself well in answering the charges against him, for he so persuaded the court of the possibilities of finding the passage in the regions he had explored that the honourable company resolved to renew the attempt the following year. For the purpose of arranging the expedition meetings were held during the winter of 1602 to 1603, but the scheme upon further deliberation was abandoned, and the vessels, *Discovery* and *Godspeed*, were placed on sale.

Weymouth accomplished nothing in the way of discovery. He visited regions already explored, and returned with less knowledge of them than his predecessors had been able to gather; yet his attempt gave some assistance to later exploration, for his logbooks fell into the hands of Peter Plancius, the geographer, who turned them over to Henry Hudson, when the latter sailed on his third voyage, and Hudson, when he failed on the northeast route, determined to try the way recommended by Weymouth. Interest in the Northwest Passage was by no means extinguished by Weymouth's failure; in fact it was never undertaken with greater energy than during the reign of James I, but the East India Company does not figure in the work, and we must look to other interests for the propelling force of the enterprise.

The reign of James I ushered in an enthusiasm bordering

on a craze for the discovery of the Northwest Passage. The attempts of the Elizabethan seamen, though unsuccessful in their ultimate object, had pointed the way, and had given the impression that the entrance to the passage had been discovered. At the risk of anticipating the exact chronological sequence of our narrative we shall pause to give the substance of a document, whose date cannot be precisely fixed, but which throws considerable light on the causes behind these expeditions, or perhaps we should say on the reasons that made the discovery of a strait so highly desirable. The document in question was found in 1851 attached to a copy of John Davis's *World's Hydrographical Description*. At first it was supposed to have been the work of Davis himself, but a careful investigation of the facts pertaining to it has led authorities to attribute it to Sir Dudley Digges, and to assign the year 1610 as the approximate date of its composition.¹⁶ The title of the paper is, *Motives inducing a Project for the Discoverie of the North Pole Terrestriall etc.* The document is a brief one and is not to be compared with Hakluyt's *Western Planting*, but it shows the motives for discovery as clearly as Hakluyt shows the benefits of colonisation in America. The policy it advocates is the building up of a powerful commercial England by selling English goods in the Far East at a profit, and buying Asiatic merchandise cheaper than it could be obtained from middlemen, by keeping up a merchant fleet and training a sufficient number of British sailors, and by obtaining naval supplies along the shores of America instead of purchasing them from foreign countries; in short it was Digges's policy to establish a system which would permit England to be self-supporting and free from the necessity of relying on her neighbours for the maintenance of her commercial organisation. "All those kingdoms," writes Digges, "are [the] most complete, glorious, and do best flourish whereunto in abundance trade and

traffic is performed. His Majesty's kingdoms, being islands whose traffic is to be maintained by navigation of strong and fortified ships, with number of able mariners, being otherwise secluded from all commerce with those of the main continent from exporting and importing of merchandise, the furniture of shipping consisting in many things which England wants, as masts, pitch, tar, rosin, and cordage, which now we enjoy by the favour of foreign potentates." ¹⁷

Digges, like Hakluyt, Gilbert and others, believed that the economic salvation of his country lay in making it self-sufficient, and in liberating it from dependence on foreign trade for the materials so essential to the welfare of the nation as those needed for the development of the mercantile marine, for, he argues, England as an island kingdom must depend for prosperity on her ships. Digges then points out that the decrease of English trade with neighbouring countries is due to the refusal of those countries to admit English goods, and this because of their desire to build up home industries. Digges therefore concludes: "We shall be of necessity enforced to seek out remote parts of the world to vend our commodities of the[se] realms at higher rate than now we do, whereby our people may live by their labours, shipping may be increased, and that our mariners be not enforced for want of entertainment to run daily into the service of other nations, to be employed there, either there to serve or at home to starve. More better it is and honourable for our state to vend our commodities in remote regions, where we may have great prizes for them, and return needful merchandise at easy rates, being had at first hand; by the same [means] increasing our ships and mariners, to the good of all, and not to be beholden to our bad neighbours or cold friends from whom we receive needless wares for our staple commodities, importing much more thereof than we export of ours, giving our money to the

boot, to [the] spoil of our land, mightily enriching our afore-said neighbours and greatly impoverishing ourselves, as doth manifestly appear throughout all the kingdom by the decay thereof." Here we have the workings of the Mercantilist school of economics: when an unfavourable balance of trade exists, as was the case with England, it must be met by the exportation of gold, and this is bound to act detrimentally to the kingdom. Yet there was more to it than the mere economic side; the problem, as in our time, was largely political. A country dependent on the goodwill of foreign trade might at any time be cut off by adverse tariff legislation or by a declaration of war, in which case it would be difficult to replace the markets or the sources of supply. The advantages of a self-sufficient empire in such a situation are obviously apparent, and it was for these that Digges was contending as a solution of existing economic problems.

Digges advocated rectifying the foregoing evils by seeking trade connections with distant countries where there would be a demand for British goods, and thus business in England would prosper. The general conditions in England at this time show an unsatisfactory state of affairs. There was much poverty and unemployment, and as a result of this there was a continual outcry against the large number of beggars, vagabonds and "sturdy rogues" who, unable to earn an honest living, turned to mischief. This was one of the great problems of the day, the attempted solution of which proved an important factor in promoting colonisation in Virginia, where, it was hoped, an asylum might be founded for the surplus population of England. The remedy for all these difficulties, according to Digges, was the discovery of the Northwest Passage which would place the Far East within easy reach. "A glorious state and renowned Great Britain would be," he exclaims, "had the same discovered the North Pole and passage into the South Sea [and] unto the

rich countries of China, Cathay, and Japan, with the islands of Moluccas and Philippines, and many other [countries] bordering upon the same seas, there to set forth the name of Jesus Christ and preach the gospel of joy where multitudes of people are not yet called, and where plenty and abundance of many rich wares are to be had at low prices and at first hand, where all our home commodities might be vended at a great rate, not only for the good and gains of the gentleman, merchant, tradesman, artificer, and labourer of all Great Britain, but also further would increase hundreds of ships and thousands of mariners, making this land the storehouse of all Europe, [which is] a matter of wonderful great importance. Over and above [all this], within the same passage doth grow in abundance all those things necessary for the furnishing of shipping, which we now have out of Poland and Russia, and there would be provided by the industry of such people as should be appointed therefor, without favour of those potentates aforesaid." This statement shows clearly the transformation that was taking place in regard to English trade with the Far East. When the first expeditions to Cathay were projected the dominant motive behind them was a wish to obtain Eastern goods at cheaper rates than they could be procured through intermediaries, and in exchange for these goods it was hoped to send articles of British manufacture, thus opening a market for home products, instead of making payment in hard money. The desire to export, it is true, was always present, as we saw in the book of Robert Thorne where the author speaks of the high latitudes which must be reached on the northern passage, which latitudes would furnish a suitable climate for the sale of woollen goods. But now the principal object of the trade, if we may judge by Digges, is to find a market for English commodities and so give employment to English workmen, while the desire for

Oriental goods is relegated to the background. We do not mean by this that there was no longer any demand for luxuries in England; on the contrary, the desire for them was never greater, but there was this difference in the English position, namely: England was no longer finding a suitable market on the continent for her products and was interested in finding an outlet for her goods elsewhere. Digges appears to have understood the value of colonisation as well as the importance of foreign markets in this business, for he concludes his treatise by suggesting that adventurers in the project of finding the passage should be granted one thousand acres of land for every hundred pounds invested "where the plantation shall be seated, either on the North or South Sea." In this plantation it is proposed to obtain the shipping supplies, such as masts, tar and pitch, which were then being imported from the Baltic provinces.

With the establishment of peace with Spain in 1604 the British government was able to turn its attention to voyages of discovery. George Weymouth again appears on the scene, this time under the patronage of the Earl of Southampton and Lord Arundel, for whom he explored the coast of New England in 1605. This journey to New England would not concern us were it not for a paragraph in Sir Ferdinando Gorges's *Briefe Narration* in which the author speaks of Weymouth having been sent on this voyage for the purpose of discovering a passage, and he says further that when Weymouth failed in this he went to Pemaquid on the Penobscot River where he captured some Indians.¹⁸ This is all we know of Weymouth's second attempt. It has been suggested that Weymouth's orders were, in truth, to explore New England, but as it was feared this might excite the jealousy of the French, it was given out as a blind that he was to sail for the Northwest Passage. This is probably the true explanation of the affair, for a glance through Rosier's

True Relation of the undertaking fails to disclose any intention on the part of Weymouth of seeking a water route through the continent.

The East India Company, undaunted by the failure of Weymouth in 1602, now joined the Muscovy Company in dispatching an expedition that was little more than a farce. An agreement was drawn up on April 10, 1606, between these two companies and John Knight, a sea captain who had been employed by the King of Denmark on a voyage to Greenland the previous year, whereby Knight was commissioned to undertake the discovery of "certain places."¹⁹ From the opening sentence of his journal we know these certain places to be the Northwest Passage. Knight's story is one of failure and can be told in a few brief words. He sailed from Gravesend on April 18, 1606, in a forty ton bark named the *Hopewell* and made for the Orkney Islands. From these islands he crossed to the coast of Labrador which he reached in latitude $56^{\circ} 25'$, and there became entangled in a great mass of ice. Buffeted by storms he managed at last with his ship half full of water to reach a cove where he found shelter from the winds. He spent many days in this place repairing the vessel; she leaked badly, and her rudder was so severely damaged that it was necessary to unship it and hang another in its place. After much labour the crew managed to get the vessel in shape and putting out to sea they succeeded in reaching Newfoundland where they were able to refit in a more workmanlike manner. This done, Knight sailed his ship back to England.

Despite these numerous setbacks the spirit of adventure still burned brightly in England. There was no diminution of the desire to find a passage. Richard Penkevell of the county of Cornwall applied for and received a license in 1607 to discover "the passage into China, Cathay and the Moluccas and other regions of the East Indies, by the

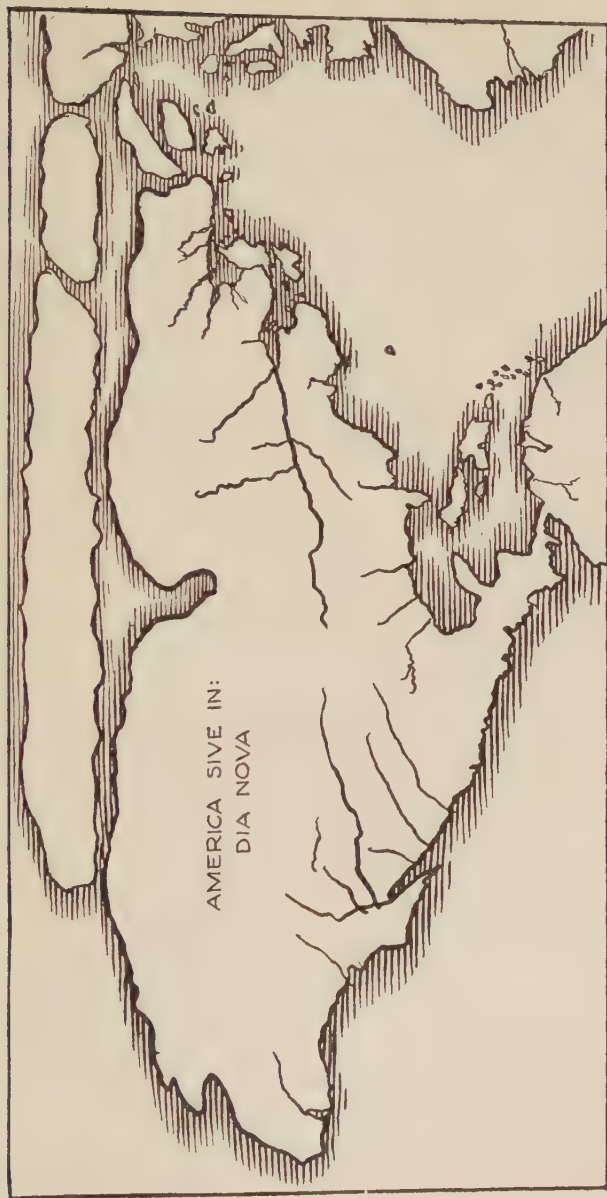
northward, northwestward or northeastward.”²⁰ He is described as a man who has travelled much and is extremely anxious to discover a passage. The charter he obtained incorporated his associates under the significant title of “Colleagues of the Fellowship for the Discovery of the Northwest Passage.” The fellowship does not appear to have undertaken any voyages. At any rate the deeds of its members, if they performed any, were now completely eclipsed by the appearance of one of the most famous explorers of the time, Henry Hudson.

While Hudson is unquestionably entitled to the credit of the discovery of the bay that bears his name, since the value of a discovery lies, not so much in priority of visit, as in the ability to make its importance known to the world, there is strong reason to suspect that others entered Hudson Bay long before him. Who these persons were there is no means of telling. The Portuguese, we know, kept in touch with the northeastern coast of America by their fishing expeditions, as did the French, and were thus in a position to enter Hudson Strait and even the bay itself. In Spanish and Portuguese circles, as we have seen, there were frequent reports of putative voyages through a northern passage. These accounts may have been based on certain facts gathered at second or third hand from obscure sea captains who had passed through the Hudson Strait into the bay and returned home under the erroneous impression that they had reached the South Sea. Such information, when it reached official ears, may very well have been kept secret. In fact there are records showing the unwillingness of the Spanish and Portuguese governments to make public their information concerning American discoveries. The evidence of maps has also been cited to prove that a vague knowledge of Hudson Bay existed before the days of Hudson. These charts, however, must be read with a certain amount of caution. It is

true that many show a strait, sometimes north, sometimes south, of Baccalaos; but the general belief in a strait, current throughout the sixteenth century and based largely on scientific reasoning and on reports of unauthenticated voyages, is responsible for this. Scholars have specifically pointed to the delineation of a gulf on a few pre-Hudson maps, such as Ortelius, 1570, and Judaies, 1593, as indicating a knowledge of Hudson Bay. Yet this is not altogether convincing, for there were, as we have shown, earlier in the sixteenth century several maps of the Verrazano type showing the Sea of Verrazano as a vast gulf reaching down to the isthmus between Florida and New France, from a northern or Arctic Ocean. This conception was the outgrowth, as we have demonstrated, of the observations of Verrazano, who believed in the proximity of the Western Sea to the Atlantic in the vicinity of Chesapeake Bay. If the outline on these maps is intended for Hudson Bay then the bay must have been thoroughly explored, for a navigator who entered it by way of Hudson Strait and sailed its vast expanse for a short distance only would at once conclude that he had reached the Western Sea and not a huge gulf. But all records of supposedly successful attempts to cross from the Atlantic to the Pacific, rehearsed by those endeavouring to prove the existence of a passage, tell only of the traveller reaching the South Sea by a strait, and make no mention of an immense bay lying southward. Furthermore, in order to show the absence of any connection between Hudson Bay and the figure on the Verrazano type of maps, we have but to turn to the *Carta Marina* of 1548. Here the great bay comes down from a northern ocean, but it is entirely cut off from the Atlantic. The author has taken pains to show a continuous belt of land stretching from America to Europe, joining Labrador, Baccalaos, Greenland and Scandinavia together. Where then did the supposed Hudson Bay of Or-

telius and Judaies originate? The bay shown by these geographers is not, we believe, an attempt to depict Hudson's subsequent discovery, but is a modified sketch of the Sea of Verrazano. It is probable that as geographers began to study the accounts of Cartier, and the magnitude of the river he had discovered gradually dawned on them, they saw the necessity of giving the territory of New France a much greater area than it was at first supposed to contain, in order to provide a drainage basin of suitable size for such a river as the St. Lawrence. Hence cartographers had no choice but to reduce the size of the Sea of Verrazano until it became a comparatively small bay in the northern coastline, as we see it on the maps of Ortelius and Judaies. It is not our contention that the waters of Hudson Bay were not visited before the days of Henry Hudson; on the contrary, there is presumptive evidence that they were. We wish to show, however, that Hudson Bay, as a bay, was unknown. The appearance of a gulf in the proper place for it on sixteenth century maps can only be accounted for as a passing tribute to the Sea of Verrazano.²¹

Of Henry Hudson's early life we know nothing. He first appears as a sea captain whom the Muscovy Company employed in 1607 to search out the northerly passage to China. In his four voyages, two under the Muscovy Company, one under the Dutch East India Company, and one under independent English auspices, Hudson attempted all the recognised ways of reaching the Western Sea by a northerly route, and in all his endeavours he was, of course, unsuccessful. The value of his work lies in his disproving the possibilities of a passage in all directions save one, thus enabling his successors to concentrate their efforts on one course. He attempted the route across the North Pole, first suggested by Robert Thorne, and failing in this tried to reach his goal by the Northeast Passage, a favourite scheme of the Muscovy



ABRAHAM ORTELIUS. MAP FROM HIS *Theatrum Orbis Terrarum*. 1570.

Company. Thwarted here on his first attempt he again sailed for the same passage, this time in behalf of the Dutch, and when blocked in his effort turned to the American coast and discovered the Hudson River. Thanks to Hudson and his process of elimination England could safely concentrate her efforts in one direction, and thus for many years after Hudson's death English vessels continued the search through Hudson Bay almost exclusively.

Hudson left London on his first voyage in April, 1607, under the auspices of the Muscovy Company, and sailed for the eastern coast of Greenland. It was his object to cruise northward along this coast for the purpose of testing the feasibility of a purely northern route. Arriving at latitude 73° he was stopped by the ice barrier that stretches east and west across the ocean. This he skirted as far as Spitzbergen in an effort to find a rift that would allow him to turn and pursue his northern course, but the way was closed, and convinced at last of the impossibility of finding a route in this direction he returned home. The following year he undertook his second voyage, this time by the now familiar route of Nova Zembla and the Kara Sea. He was no more successful on this than on his first attempt, and on his return the Muscovy Company, at last realising the impracticability of a passage along the northern coast of Asia, gave up the business once and for all, leaving to others the glory of reaching the East by a different course.

For some time the Dutch had been interested in finding a shorter route to Asia than the one over which the Dutch East India Company was accustomed to travel; but wars and political events had prevented any definite action being taken. As early as 1577, if not earlier, the matter was being seriously considered, for Hakluyt quotes Abraham Ortelius, the geographer, as saying, when he was in England during that year, that "if the wars of Flanders had not been, they of the

Low Countries had meant to have discovered those parts of America, and the north west strait before this time. And it seemed," continues Hakluyt, "that the chief cause of his [Ortelius] coming into England was to no other end, but to pry and look into the secrets of Frobisher's voyage; for it was even then, when Frobisher was preparing for his first return into the northwest." ²² Thirty years later affairs had changed in such a manner as to enable the Netherlanders to turn their attention more to matters of exploration, for, among other things, they were acquiring by conquest the East Indian factories of Portugal. The Dutch East India Company had the privilege of trading with the East by the southern or Cape of Good Hope route; but a rival element in the Netherlands consisting mainly of Belgians, influenced by the suggestions of the geographer, Peter Plancius, began an agitation for a shorter passage to China by way of the northeast. In order to anticipate this move the East India Company invited Hudson to wait upon them for the purpose of discussing the details of an expedition which it proposed to place under his command. The conference was unsatisfactory; the company after listening to Hudson's offers declined to accept them, and the negotiations were broken off for the time being. This rupture was eagerly seized upon by the Belgian faction as an opportunity for organising a scheme of their own, and Isaac Le Maire, one of their leaders, proposed to President Jeannin, minister to King Henry IV of France, a plan for founding a rival company which would employ Hudson and dispatch him to discover the Northeast Passage, and thus, if the undertaking were successful, an East India Company would be established under French protection. The East India people getting wind of the scheme became alarmed at the possibility of competition and hastened to summon Hudson before them again. But there was dissension in the ranks, the Chamber

of Zealand refused to take part in the business as they were discouraged with the results of the two previous voyages made by Hudson for the Muscovy Company, and they felt that such a venture would be spending money in a hopeless cause. As a result of this refusal the Amsterdam Chamber shouldered the burden itself and signed an agreement with Hudson.

While awaiting the outcome of the negotiations Hudson had not been idle. He had had the good fortune to become acquainted with Peter Plancius, and he took advantage of this opportunity to discuss with the geographer the possibilities of a northern route to China. Plancius, it appears, had in his possession the logbook of George Weymouth covering the expedition of 1602, and this he presented to Hudson. Hudson learned from this record the story of Weymouth's penetration of certain narrows north of Virginia, by which was meant Frobisher's Strait, since the term, Virginia, was frequently used to designate the great portion of the American Continent nominally claimed by England, and from this he judged that the route to India had been found. Hessel Gerritz, a contemporary writer, in his commentaries on Hudson's last voyage, gives a very good idea of the influence exerted on Hudson by Weymouth, despite the efforts made by Plancius to disprove the theories found in Weymouth's records. Gerritz says that Weymouth sailed one hundred leagues in Lumley's (Frobisher's) Inlet, and finding the land closed to him was forced to return, but not before he had explored two other bays, "and found there the water wide and mighty like an open sea, with very great tides." "This voyage," says Gerritz, "though far from fulfilling Weymouth's hopes, assisted Hudson very materially in finding his famous strait. George Weymouth's logbooks fell into the hands of the Reverend Peter Plancius, who pays the most diligent attention to such new discoveries,

chiefly when they may be of advantage to our own country; and when in 1609 Hudson was preparing to undertake a voyage for the directors of the East India Company, in search of a passage to China and Cathay by the north of Nova Zembla, he obtained these logbooks from Peter Plancius. Out of them he learnt this whole voyage of George Weymouth, through the narrows north of Virginia till [he came] into the great inland sea; and thence he concluded that this road would lead him to India. But Peter Plancius refuted this latter opinion from the accounts of a man who had searched and explored the western shore of that sea, and had stated that it formed an unbroken line of coast.”²³ The arguments of Peter Plancius were not entirely convincing, for Hudson, after attempting the Nova Zembla route, turned to the American coast. Perhaps in doing this Hudson was influenced, not so much by Weymouth's account, for he reached the coast far south of the scene of that explorer's course, as by the maps and letters of Captain John Smith, who at this time was engaged in establishing the colony in Virginia and in exploring the rivers and bays of this locality in the hope of finding some communication with the South Sea. Smith at the time these papers were dispatched had not yet made a thorough search of Chesapeake Bay; had he delayed writing to Hudson until his return from his second expedition up the bay in the summer of 1608 he would have known that this great gulf had no connection with any sea save the Atlantic, for it was presumably the Chesapeake he regarded as a strait. This matter will be treated more fully in the chapter dealing with Smith's explorations.

The expedition under Hudson sent forth by the Dutch East India Company, consisted of the *Half-Moon* and the *Good Hope*. It left Amsterdam on March 25, 1609, and steered for the North Cape with the intention of continuing the attempt which Hudson had made the previous year

for the Muscovy Company. When nearing Nova Zembla a mutiny broke out, the crew refused to continue any farther, and Hudson was perforce obliged to comply with their demands. Then, remembering the assurances of John Smith regarding a passage in Virginia, he set his course for the American coast, which he reached in latitude 43° . There he turned southward carefully navigating the *Half-Moon*—the *Good Hope* had by this time disappeared—and by means of frequent observations and careful soundings he eventually came to the coast of Carolina in latitude $35^{\circ} 41'$. Here the ship sailed slowly up the shore looking for the passage. Chesapeake and Delaware Bays were entered, but how far, Juet, the chronicler of the expedition, fails to say. He mentions bays, and from this we may surmise that Hudson satisfied himself that these inlets were arms of the sea and not passages. Eventually he reached New York harbour and sailed up the Hudson. Did Hudson in ascending the river believe he was on the track of a route to the Western Sea? From all the evidence we have it is apparent that whatever may have been his expectations on entering New York harbour he was speedily disillusioned, for in Juet's narrative there is no indication of such a belief. The waters of the Hudson are frequently referred to as those of a river, and never as those of a strait. What prompted him then to ascend the stream as far as modern Albany? Natural curiosity may be cited as a motive, but there may also have been another reason. Captain Smith, on his visits to the Indian chief Powhatan, had heard reports of the proximity of a salt water sea just beyond the source of the James River. His map (the one Hudson had with him) illustrates this view, for at the head of the James River Smith placed on his sketch a legend, partly illegible, which reads: "Amongst high rocks etc." This quotation refers to a passage in Smith's *True Relation* describing the salt water sea beyond

the Falls of the James, and from this Hudson may have been led to believe in the proximity of the Pacific to the Atlantic in the region he was now exploring. His voyage up the Hudson, therefore, if it was not a mere excursion of curiosity, was probably undertaken for the purpose of ascertaining whether or not the river had its source near the Western Ocean. In any event Hudson was not at this point looking for an all-water route through the continent. The discovery of the Hudson proved to be the last discovery made on the voyage, and the explorer feeling that he had silenced any assertion of a passage in this locality sailed for home.

The following year saw Hudson embarked on his final enterprise. He had by this time satisfied himself, as well as his backers, that there was only one direction in which it was possible to find the passage, and that was the one suggested by Weymouth. The Dutch had now abandoned the undertaking, and Hudson was obliged to return to England to find persons interested in sending him on another voyage. The time was propitious, for the craze for the Northwest Passage was at its height. "In the year 1610," writes the Reverend Samuel Purchas, "Sir Thomas Smith, Sir Dudley Digges, and Master John Wolstenholme, with other their friends, furnished out the said Henry Hudson, to try if, through any of these inlets which Davis saw but durst not enter, on the western side of *Fretum* Davis, any passage might be found to the other ocean called the South Sea. Their bark was named the *Discovery*."²⁴ Hudson's intention on this journey was to look for a passage through Frobisher Bay, or, as he called it, Lumley's Inlet, a course by which he hoped to reach the Pacific, for he was given to understand that another Englishman (Weymouth) had been successful in finding the strait in this direction.²⁵ At this time it must be remembered, Lumley's Inlet was not

universally regarded as a closed gulf, but was believed by many to lead to a strait. Though Hudson himself wrote a journal it was the story of his activities only up to the time when he was cast adrift by his crew, and for a complete account of the voyage we are, therefore, obliged to rely on the narrative of Habacuk Prickett, a servant of Sir Dudley Digges, who accompanied Hudson as one of his company.

The expedition sailed on April 17, 1610, and steered for Greenland which the explorers reached on the fourth of June. Rounding Cape Desolation at the southern extremity of this island, they sailed northwest, and towards the end of June raised land to the northward which proved to be Resolution Island at the southeastern end of Frobisher Bay. Here they met with ice that drove them south of the island into Hudson Strait. The strait did not promise easier navigation and Hudson soon found himself hemmed in by ice, so picking his way carefully through the bergs and pack-ice that surrounded him he proceeded up the passage to an archipelago on the northern shore, which he called the Isles of God's Mercy. From there he proceeded, still encountering the same difficulties with the ice, to the entrance of Hudson Bay, and rounded the point on his southern side, which he named Cape Wolstenholme in honour of the patron of the expedition. He then coasted the eastern shore of Hudson Bay and sailing southward entered James Bay, where, unable to go any farther, and the season being well spent, the party decided to spend the winter. It was during their stay in winter quarters, when lack of sufficient food frayed the tempers of the crew, that the trouble, which later broke out into open mutiny, had its origin. The difficulties seem to have been due chiefly to the dissatisfaction of Henry Green, a man of unsavoury character, who had unfortunately been permitted to embark in the expedition. As Prickett is vague in his geographical descriptions it is impossible to point out

with any accuracy the place where the party wintered, or the spot at which the mutiny broke out, or the exact course of the vessel on its homeward journey; but it is probable that the winter was spent in the southeastern part of James Bay. In the spring the explorers started for home. They had not gone far when the trouble, which had been brewing during the winter, came to a head, and the mutineers, placing Hudson and a few of his followers in a boat, cast them adrift. The crew then manned the ship and navigating as best they could eventually reached England.

What was the nature of this body of water Hudson had discovered beyond the strait? He had sailed far enough to the south to learn that what might be the ocean was in reality a huge bay, but neither he nor his crew had sailed far enough westward to learn its extent in that direction. The western shore of James Bay, not of Hudson Bay, had been located, and by a curious mistake geographers assumed this coastline to extend northward along the same meridian to the latitude of Hudson Strait, thus Hudson Bay on some of the earlier maps, notably on Champlain's chart of 1613, appears as a long narrow inlet.

As considerable indignation was felt at the base desertion of Hudson by his crew, the survivors of the expedition were summoned by the officials of Trinity House and their depositions taken; at the same time the discovery they had made was of such vast importance that every effort was made by these officials to learn from them what they could about it. In sifting the evidence great attention was paid to the currents encountered in the strait and bay, as these were believed to give the key to the location of a further passage. The problems raised by this inquiry were summed up by the following questions which the officials propounded to themselves:

"Whether that great [Hudson] Bay must not be fed from the [Western] Ocean?

"Whether that [Western] ocean lie not northwest of Salisbury Headland [Salisbury Island at the western end of Hudson Strait] and the Straits?

"Whether that [Western] ocean can be other than the South Sea?" ²⁶

After considering these questions deeply in the light of the evidence submitted the officials proffered the following opinion: "Whereas it is inquired of us, the master, wardens, and assistants of the Trinity House, what our opinion is concerning that discovery which is made in the northwest: We, having deliberately heard the master of the said ship that brought her home (who is the only man of that company that can speak of navigation), do conclude, for ought we can discern by such globes as we have viewed: that the said ship was never so far to the westward to recover the South Sea as we conceive the land to be by many leagues: and our opinion is that the same grand bay in which they sailed must be fed from the ocean: but [we] cannot conjecture that it is from the South Sea, but rather from the ocean on the northeast side of the continent, because the current did drive perpetually from the east. But, whereas the islands of ice drive away from Cape Salisbury west-northwest, the land trending north-northwest, and that at the same cape it heights 4 or 5 fathoms water and keeps a true course of tide, as he reports, we think that the passage is to be found between the west and the northwest, and not more northerly."

The opinion, then, of these learned officials was that the waters discovered by Hudson on the western side of Labrador were not those of the South or Western Sea, but those of a great bay. Salisbury Island was regarded as the dividing point; the bay trending to the south, and the further passage lying towards the northwest. The theory of a

through passage in these northern waters, as deduced by them from the information submitted, received the approval of Purchas, who in commenting on the evidence of the tides illustrates his point by reference to an incident that occurred to Hudson's crew on the return journey. He says: "A few days after, their victuals being spent, the ship came aground at Digges Island,²⁷ and so continued divers hours, till a great flood (which they by this accident took first notice of) came from the westward and set them on float."²⁸ To this Purchas adds the comment, "a flood from the west, a very probable argument of an open passage in the south." Subsequent explorers were impressed with the actions of the currents described above and on reaching the western entrance of Hudson Strait either took a westerly course across the bay or, turning northward (not to the south as Purchas suggested), entered Fox Channel and sailed until the ice barrier halted them.

Admiral Monson, a contemporary of Hudson, made a careful examination of the information gathered by Hudson's crew, which information he obtained from the lips of a man who had sailed in the *Discovery*. Monson had made a thorough study of exploration in general, and English exploration in particular, so he was well qualified to sift the evidence presented him and give his opinion regarding the possibility of a passage through Hudson Bay. He points out that the explorers found a current at the western end of the bay (for Monson wrote after this part of the bay had been explored) that came from the northwest. In his opinion the current must originate in a western sea, since the water to the south ends, as Hudson showed, in a large but shallow bay (James Bay). According to Monson the object of the next voyage must be to learn whence this current comes, and to see if, in sailing westward and northwestward, one would find a strait leading southward, or an open sea to the north-

west. Two valuable items of knowledge had been acquired by Hudson's voyage, said the Admiral: first, it extended exploration two hundred leagues farther west; and second, it put an end to the hope of a passage leading directly to a South Sea situated at no great distance from the Atlantic. Suppose, reasons Monson, that being two hundred leagues in the strait one meets with a northwest flood. If it runs in the middle of the main channel it probably comes from the sea, but if it is found among islands it probably does not lead to a passage. Hudson's men, unfortunately, admit having noticed the tide among rocks; but there is nevertheless a hope that the northern part of America may be open water and not land as is shown on many charts. In this case the passage from England to China may be shorter in this direction than over the other routes; although if one is obliged to circumnavigate much land the route may open trade with Japan and China, but will be of no advantage in dealing with the Moluccas and East Indies.²⁹

The fate of Henry Hudson caused much sympathy to be felt for this unfortunate navigator, and the results of his exploit roused great interest. This interest took form presently in the incorporation of a company on a greater scale than had heretofore been attempted. The coterie, headed by Wolstenholme, Digges and Thomas Smith, which had dispatched Hudson on his last voyage, now applied for a charter, and the same was granted by King James on July 26, 1612. This document gives articles of incorporation to a large number of individuals including, in addition to those named above, such distinguished persons as the Archbishop of Canterbury, Francis Bacon, Hakluyt, the Earl of Southampton and the Earl of Salisbury; the entire body consisting all told of twenty-five peers, thirty-seven knights, thirty-eight esquires, and one-hundred and eighty-eight merchants, in short all who had taken any interest in Arctic

exploration. It was placed under the august patronage of Henry, Prince of Wales. The organisation was called the "Governor and Company of the Merchants of London, Discoverers of the Northwest Passage," but for the sake of brevity we shall refer to it as the Northwest Company. The corporation received by this charter a complete monopoly of the passage and the settlements therein to the exclusion of all other persons. By this grant the King repealed all previous licenses, such as the patent given to Adrian Gilbert by Elizabeth; and he further agreed not to give any privileges to trade in the region assigned to the Company without the consent of its members. In order to establish the territory over which the patentees should have jurisdiction, the passage was located, by what was virtually a consensus of opinion, between Cape Desolation in southern Greenland and the headland called Labrador at about the fifty-eighth parallel, thus giving complete access to the west by way of Hudson Strait and Davis Strait, the only two routes through which a passage could possibly be found. The patent was further extended to cover all the seas between the two straits and northward, northwestward and westward to Tartary, China, Japan, Korea and to all other countries in the South Sea in America, Asia and the islands.³⁰ Never before had a company of merchants been established in such an elaborate manner. The names mentioned in the charter show the incorporators to have been men of even higher rank than those who had taken shares in the East India Company. Thus the work of Hudson bore fruit.

Men now regarded the passage through the American barrier, not so much as a possibility or even as a probability, but almost as an accomplished fact. The continent had been pierced, and beyond it lay a vast body of water which must surely be connected with the Western Sea at no great distance. There was therefore no lack of funds to finance the

next expedition, for profits seemed large and close at hand; and the year after the return of Hudson's crew, even before the charter had been granted, the company dispatched Thomas Button on a voyage of exploration. It is but fair to say, however, that the adventurers were mindful of the obligations they owed to Hudson for opening up the passage to them, and that one of the objects of Button's expedition was to make a search for the missing explorer. Perhaps this object caused them to hasten preparations for Button's departure. Button was given two ships with orders to send one of them through the passage, if he found it, and to dispatch the other back to England with the joyful news. The expedition was planned late in the year 1611. In a letter telling of the early preparations, Sir John Wolstenholme says: "Sir Dudley Digges is in consideration of this new discovery of this northwest passage, wherein he is a great undertaker. [This matter] will [not] give him leave to think of anything else, for it possesseth him wholly, and they are preparing ships against the spring, as if there were no doubt or difficulty at all in the weather, and the prince is become patron and protector of this new discovery."³¹

Prince Henry took his responsibilities as a patron seriously. He wrote to Thomas Button, giving him detailed instructions how to proceed in his attempt, instructions which Button afterwards blamed as the cause of his failure. Button is ordered to take complete observations in order to establish the location of all important places for future reference, and he is also advised how to reach Hudson Strait and how to identify it when he gets there. "Make all the haste you may," writes Henry, "to Salisbury his island, between which and the northern continent you are like to meet a great and hollow billow from an opening and flowing sea from thence. Therefore, remembering that your end is west, we would have you stand over to the opposite main, in

the latitude of some 58 degrees, where, riding at some headland, observe well the flood; if it come in southwest, then you may be sure the passage is that way; if from the north or northwest, your course must be to stand up into it, taking heed of following any flood for fear of entering into bays, inlets, or sands [sounds?], which is but loss of time to no purpose." Button is warned to seek the south if winter should overtake him, "for we assure ourself by God's Grace," continues the Prince, "you will not return, without either the good news of a passage, or sufficient assurance of an impossibility." Eagerness for news of a discovery is plainly shown, for Button while he is told to search for a suitable harbour in the South Sea, is urged to spend but little time on this sort of thing until the pinnace has been dispatched home with news of the discovery.³² For some reason not ascertainable, but which probably arose from a desire to keep the location of the passage a state secret, the result of the voyage was enshrouded in secrecy. Purchas felt that he could not get sufficient information regarding it, and Henry Briggs was also kept in the dark. Button himself retained the journals of the expedition, though he hints at some mystery surrounding the expedition for which he was in no wise responsible. For our knowledge of the voyage we are indebted to the explorer, Luke Foxe, who obtained his information from Habacuk Prickett, a member of the crew, and also from Sir Thomas Roe, one of the backers of the enterprise.

Thomas Button sailed in April, 1612, with two vessels, the *Resolution* and the *Discovery*. Among his companions were several who had already served their apprenticeship in Arctic travel or were to win renown by commanding expeditions to take up the work where he left off. We may mention Gibbons, Hawkrige, Bylot and Prickett, truly a distinguished gathering of sea captains. Button was armed

with letters of credence from the King, addressed to the sovereigns whom he might visit and requesting them to entertain the King's subjects hospitably. Considerable confidence was placed in the undertaking, for significant comments on its progress appeared in the several editions of Hessel Gerritz's works that were published during Button's absence. The first edition pointed out that one vessel would sail through the passage while the other would return home with news of the discovery. A later edition prophesied the return of the vessel any day; and when after months of waiting the ship failed to put in an appearance, it was confidently asserted that both ships had by now passed through the strait and nothing would be heard of them until they returned from China.

Meanwhile, as may be imagined, Button was meeting with far different experiences than his optimistic backers were predicting. He had reached Hudson Strait and passed through it to Digges Island at its western extremity, where he stopped long enough to construct a pinnacle. On leaving this island he made his way almost due west to Coats Island, the southern extremity of which he named Cary's Swan's Nest. He then proceeded in a westerly direction across the bay to the western shore, which he sighted just above the sixtieth parallel at a spot called by him Hopes Checked, as significant of the fact that the route to the west was closed at this point. Following the shoreline southwards Button eventually came to the little bay at the mouth of the Nelson River, where he decided to put up for the winter, for the season was now well advanced and he saw that the finding of a passage, if it could be accomplished at all, meant in all probability a long and continuous search, hence he preferred to spend the winter at the Nelson River, where he would await the spring before attempting to carry out his programme. The

place where he anchored was known for some time afterwards as Button's Bay, and it appears on early seventeenth century maps under that name, but as a much larger bay than it actually is.

While wintering here Button propounded questions to his officers for the purpose of obtaining their advice on the course to be pursued the coming spring. Josias Hubbard, one of his lieutenants, expressed his opinion as follows: "My answer to the second demand ³³ is to search to the northward about this western land, until, if it be possible, that we may find the flood [tide] coming from the westward, and to bend our courses against that flood, following the ebb, searching that way for the passage. For this flood which we have had from the eastward, I cannot be persuaded but that they are the veins of some headland to the northwards of the Checks [Hopes Checked], and by the inlets of rivers which let the flood tides into them; which headlands being found, I do assure myself that the tide will be found to come from the westward." ³⁴ Button evidently acted on this advice, for in the spring, when the ice had broken up, he retraced his steps along the western side of the bay. Sailing far to the northward he picked his way slowly among the islands that fringe the coast, until he had penetrated well into the channel between Southampton Island and the mainland, known as Roe's Welcome. Here at the sixty-fifth parallel of latitude he gained the impression of being embayed, and so he turned about and made his way to Cary's Swan's Nest, whence he sailed for England. Luke Foxe, from whom we have the account of this voyage, was by no means sure that Button had reached the bottom of a gulf in Roe's Welcome, though Button's farthest north was called *Ne Ultra* on Henry Briggs's map, and was considered for some time the end of any passage in that direction. Foxe, it is true,

later attempted a search in this locality, but did not penetrate so far as Button, and it was many years before the Welcome was explored any farther.

Despite the failure of Button to find the strait or even an opening leading to it, his report was favourably regarded, and it acted as a stimulus to further efforts. Henry Briggs, the geographer, gave an encouraging interpretation of Button's data on the tides in Hudson Bay. Inscriptions on his map state that at Port Nelson, in latitude fifty-seven, where Button wintered, the tide rose fifteen feet or more in every twelve hours, and a west wind made the neap equal to the spring tides; while the tide at the bottom of Hudson Bay was but two feet, and in Davis Strait, according to William Baffin, it was but four. Hence, reasons Briggs, "the increase of those tides [at Port Nelson] whensoever any strong western wind did blow, do strongly persuade us that the main western ocean is not far from thence; which was much confirmed unto them [Button's party] the summer following; when sailing directly north from that place where they wintered, about the latitude of 60 degrees, they were crossed by a strong current running sometimes eastward, sometimes westward: so that if we find either Hudson's Bay, or any sea more near unto the west, we may assure ourselves that from thence we may with great ease pass to any part of the East Indies." ³⁵ He concludes from this that the South Sea is not far from the western part of the bay, and that the discovery of the strait leading to it is imminent; which strait, he says, is "far more wholesome and temperate through the continent of Virginia, and by Fretum Hudson to all those rich countries bordering upon the South Sea, in the East and West Indies," than the route discovered by the Portuguese.

The Northwest Company immediately began preparations for another expedition. The year after Button's return the

Discovery was once more sent out, this time under Captain Gibbons, who made an insignificant voyage. Little is known about this expedition, and, in truth, there is little about it to know. Gibbons sailed for Queen Elizabeth's Foreland, then cruised southward across the mouth of Hudson Strait and along the coast of Labrador until he found a bay to his liking, and anchoring there he remained so long that the crew called it, "Gibbons, his hole." This voyage added nothing to geographical knowledge and is not worth recording save as an illustration of the keen interest shown by the Northwest Company in the work they had set out to do. The following year, however, came an important expedition under Bylot and Baffin.

William Baffin, when he entered the service of the Northwest Company, was able to boast of considerable experience as an explorer. Of his early life we know nothing. We first hear of him as a pilot on the vessel, *Patience*, which under Captain Hall was sent in 1612 on a voyage of discovery by Sir Thomas Smith and three associates. On his return from this journey Baffin entered the service of the Muscovy Company in the same capacity, and made two voyages to the island of Spitzbergen. It was on one of these voyages that he became familiar with the system of keeping accurate records by means of careful scientific observations, a system which had been organised by Sebastian Cabot, and which the Muscovy Company had maintained ever since. This system Baffin brought with him when he entered the service of the Northwest Company. In addition to this valuable knowledge Baffin had made a careful study of the methods of taking observations, and was able to compute the variations of the compass, to calculate the dip of the magnetic needle and the refraction of the sun, and, what was particularly unusual in his day, he could determine longitude at sea, a feat which he performed by taking the altitude of the

moon or of a star. He is the first navigator so far as is known to take observations for longitude at sea. These accomplishments make the accounts which he wrote of his voyages doubly valuable; and, no doubt, they had considerable weight with the adventurers of the Northwest Company, who were inclined to regard his reports of his failure to find the passage as final, for after the second journey he made under their auspices, interest in the discovery dwindled.

The first of Baffin's expeditions, which comes within the scope of our story, was organised in 1615, and Robert Bylot, who accompanied Button in 1612, was appointed master of the expedition, while Baffin was engaged as his pilot. We owe our information of this voyage to Baffin. His report must have been a source of joy to his patrons for it contains a record giving day by day in tabulated form a complete account of the journey, so that they could plot on a map with remarkable precision the course followed by their pilot.

Baffin set sail March fifteenth on that veteran of the Arctic seas, the *Discovery*, and reached Resolution Island at the entrance to Hudson Strait on the twenty-seventh of May. From there he proceeded through the strait, skirting the northern shore and making careful record of all that seemed useful to him. Arrived at the western end of the passage he devoted himself to a study of the tides about Salisbury Island; then he proceeded northwest into Fox Channel and up along the northwestern shore of Southampton Island until he reached Frozen Strait, which connects the Channel with Roe's Welcome. Here he encountered a barrier of ice blocking his path which led him to abandon any further attempt to seek the passage in this direction. He returned to Hudson Bay and again plunged into his tidal studies, this time off the coast of Nottingham Island, for he was particularly interested in checking up the observations

of Sir Thomas Button who had predicated his belief in the existence of a passage on the tidal disturbances he had observed in this locality. Having completed his work Baffin then returned to England.

Baffin's voyage had been negative in its results rather than positive, and in drawing up his report he sought, in the light of his own experience, to eliminate the route by Hudson Strait as the one by which the Western Sea could be reached. He sums up his ideas of the passage as follows: "And now it may be that some expect I should give my opinion concerning the passage. To those my answer must be, that doubtless there is a passage. But within this strait, whom is called Hudson Straits, I am doubtful, supposing the contrary. But whether there be, or no, I will not affirm. But this I will affirm, that we have not been in any tide than that from Resolution Island, and the greatest indraft of that cometh from Davis Straits: and my judgement is, if [there is] any passage within Resolution Island, it is but some creek or inlet, but the main will be up *Fretum* Davis; but if any be desirous to know my opinion in any particular, I will at any time be ready to show the best reasons I can, either by word of mouth, or otherwise."³⁶ Baffin's conclusion as to the impossibility of reaching the passage by Hudson Bay was, of course, erroneous, for there is, as modern exploration has shown, a water connection between Fox Channel and the various waters to the north of it; but the route by way of Davis Strait is the more practical, if the term practical can be applied to such an undertaking. Thus Baffin was right in advising explorers to spend no further time in this direction, but to turn their attention to Davis Strait instead of exploring Hudson Bay. The Northwest Company was impressed by the suggestion and acted accordingly: the Hudson Bay route was for a while abandoned and the adventurers directed their energies to Baffin's Bay.

Another expedition was immediately fitted out to sail in 1616. In their instructions to Baffin, for the management of the enterprise was entrusted to him, the directors of the Company wrote: "For your course you must make all possible haste to Cape Desolation; and from thence you, William Baffin, as pilot, [will] keep along the coast of Greenland and up *Fretum* Davis, until you come toward the height of eighty degrees, if the land will give you leave. Then, for fear of embaying, by keeping too northerly a course, shape your course west and southerly, so far as you shall think it convenient, till you come to the latitude of sixty degrees; then direct your course to fall in with the land of Yedzo [Japan], about that height, leaving your further sailing southward to your own discretion, according as the time of the year and winds will give you leave; although our desires be, if your voyage prove so prosperous that you may have the year before you, that you go so far southerly as that you may touch the north part of Japan, from whence, or from Yedzo, if you can so compass it without danger, we would have you bring home one of the men of the country; and so God blessing you, with all expedition to make your return home again."

Again was Robert Bylot chosen master and again the *Discovery* was refitted for an Arctic expedition. Baffin left England on March twenty-sixth, and in due course of time came to Hope Sanderson on the western coast of Greenland, so named by Davis as the farthest north reached by him. Baffin continued northward, struggling continually with the ice, but on the first of July he reached open water in latitude $75^{\circ} 40'$. Now the way was clear and he proceeded hurriedly northward, the bay becoming gradually narrower, until he reached in latitude 78° a channel leading to the north, and this he named Smith Sound. He then turned down the western shore of Baffin's Bay, passing two small straits which

he mistook for gulfs, and named them Jones Sound and Lancaster Sound, after two of his patrons. "Here," writes Baffin, "our hope of passage began to be less every day than another, for from this sound [Lancaster] to the southward we had a ledge of ice between the shore and us, but clear to the seaward, we kept close to this ledge of ice till the fourteenth day in the afternoon, by which time we were in the latitude of $71^{\circ} 16'$, and plainly perceived the land to the southward of $70^{\circ} 30'$, then we having so much ice round about us, were forced to stand more eastward, supposing to have been soon clear [of it], and to have kept on the off side of the ice until we had come into 70° , then to have stood in again."³⁷ The ice caused them to sail eastward to the open sea, and then turning southward they kept their course until they again saw land on the sixty-eighth parallel. Continuing in the same direction the expedition presently reached $65^{\circ} 40'$ where, all hope of a passage being abandoned, they returned to England.

The result of Baffin's second voyage can best be shown by a quotation from the letter he addressed to Wolstenholme, his principal patron. "Therefore, briefly thus," he writes, "and as it were in the forefront, I intend to show the whole proceeding of the voyage in a word as, namely, there is no passage nor hope of a passage in the north of Davis Strait: we having coasted all or near all the circumference thereof, and find it to be no other than a great bay, as the voyage doth truly show. Therefore I cannot but much admire the work of the Almighty, when I consider how vain the best and chiefest hopes of men are in things uncertain; and (to speak of no other matter than the hopeful passage to the Northwest) how many of the best sort of men have set their whole endeavours to prove a passage that way? Not only their conference, but also in writing and publishing to the world: yea, what great sums of money have been spent about the

action, as your Worship hath costly experience of? Neither would the vainglorious Spaniard have scattered abroad so many false maps and journals, if they had not been confident of a passage this way; that, if it had pleased God a passage had been found, they might have eclipsed the worthy praise of the adventurers and true discoverers. . . . Now that the worst is known concerning this passage, it is necessary and requisite your Worship should understand what probability and hope of profit might here be made hereafter, if the voyage might be attempted by fitting men.”³⁸ The profit Baffin goes on to explain consists chiefly of whale fishing.

It is interesting to trace the fate of Baffin’s discoveries in the north. Baffin, as a matter of fact, was not the first to enter the bay that bears his name, for John Davis, it will be remembered, passed through Davis Strait and cruised along the western shore of Greenland to Hope Sanderson. But the accurate surveys of Baffin, afterwards illustrated on his map (no longer extant), gave a distinct picture of the geographical information he had acquired. The first chart to show Baffin’s discovery is a rare one found only in one or two copies of Luke Foxe’s *Northwest Foxe*. Baffin’s Bay is given on this map as an elongation of Davis Strait with no outlet save the one to the south. The Hondius atlas, 1636, shows a different conception, for here the bay has its greatest length from east to west instead of from north to south, and is connected by a channel with the western end of Hudson Strait, while at its northwestern extremity are the two indentations labelled Alderman Jones Sound and Sir James Lancaster Sound, which Baffin discovered on his second voyage. Coming down to the year 1700, we find a similar idea on de Lisle’s *Amerique Septentrionale*; but in 1720 Moll in his atlas combines the outlines of the first two maps we have mentioned, showing Foxe’s design in bold configuration, while shaded lines give the idea of Hondius, leaving the

reader to his own choice. Lastly, coming down to 1818, we find a sketch in Daines Barrington's *Possibility of Approaching the North Pole Asserted*, with a huge bay drawn by a dotted line, and bearing an inscription to the effect that the bay is set forth according to Baffin, but that its existence is no longer believed. It is to Baffin's credit, however, that Sir John Ross in his rediscovery of the bay in 1818 testifies to the accuracy of Baffin's observations.³⁹

Baffin's voyage ended an unbroken series of annual explorations which had taken place during the ten years preceding it. Ever since 1606 each year saw the fitting out or return of an expedition in search of the Northwest Passage. And now Baffin with his remarkably accurate observations and his scientific deductions announced to the world that the passage was a myth. The members of the Northwest Company were satisfied with their agent's reports, and accepting his conclusions virtually retired from the field, leaving the work of exploration to those who might care to undertake it. Yet despite the theories of Baffin, theories which, it is true, appeared to be based on facts, hope was not wholly abandoned, as some still pinned their faith on the conclusions predicated on the phenomena of the tides observed by Captain Button in the northern and western parts of Hudson Bay, and while all attempts through Davis Strait were permanently abandoned, it was still hoped that a way might be found farther south. This desire was translated into action by Sir John Wolstenholme, who on January 20, 1619, announced to the East India Company his intentions of making another effort to find the passage. He wished the Company to assist him financially in the scheme; and as evidence of the feasibility of his plan he cited the statement of Button regarding the great tide at Port Nelson, or, as it was then called, Button's Bay. The cost of furnishing two pinaces for the enterprise was estimated at two thousand

pounds, of which the company agreed to contribute two hundred. Although those who assisted Sir John were members of the Northwest Company, the company acting in its official capacity probably had no connection with the enterprise. The commander, Captain Hawkrige, to whom the voyage was entrusted, was a man about whom very little is known save that he had sailed under Button, a circumstance which may very well have led to his selection. He left no record of his journey; the only information we have of his wanderings is what we glean from the notes of Captain Luke Foxe, and this account gives only a bare outline, based, judging from the contents, on a logbook or diary given Foxe by Hawkrige. The expedition itself was insignificant and served but to confirm the opinions of Baffin. Hawkrige sailed through Hudson Strait and explored regions already familiar to navigators. His meandering course took him around Salisbury and Nottingham Islands, up into Fox Channel for a short distance and southward along the eastern shore of Hudson Bay as far as the Ottawa Islands, where, turning back northward, he completed his survey and sailed back to England. No conclusions are drawn by Foxe on the results of Hawkrige's voyage, for the captain discovered nothing new and threw no fresh light on the perplexing question of the passage. From his course one is inclined to believe that he was trying to find some clue of it from the tides described by Button.

A lapse of twelve years now took place in the search for the Northwest Passage. During this time nothing was undertaken; but we find hidden away in the State Papers a hint that the Duke of Buckingham had for a moment cast his eyes to the northwest. King Charles in 1625 granted the Duke a pinnacle named the *Lion's Whelp* for the purpose of attempting to find a strait, and a warrant was issued later to Captain Hawkrige, permitting him to transport two hun-

dred pounds in foreign coin for service on this voyage of discovery. The proposed journey never took place, but the preparations for it serve to remind us that the matter was not entirely forgotten.

Six years later two expeditions were sent out which may be regarded as the final efforts of the English to solve the northwest mystery in the seventeenth century. They were the simultaneous yet independent voyages of Luke Foxe and William James. Foxe was a man of unusual talents who for years had devoted his time to the study of various explorations in the Northwest, and whose ambition was to discover the strait leading to the Western Sea. Born in the year 1586, he applied at the early age of twenty for a position as mate under John Knight, whose abortive attempt in 1606 has come under our notice. Such earnestness as his was bound to bring forth results, and the results produced are to be found, not only in the form of a voyage of exploration, but in a literary work summarising the achievements of his predecessors. Foxe published the narrative of his voyage in a voluminous treatise entitled *The Northwest Foxe*, a book containing, in addition to the author's personal story, a recapitulation of some fifteen previous voyages in the Arctic regions. These accounts were taken mainly from Hakluyt and Purchas, but we find in the work material concerning journeys, like that of Hawkrigde, of which no other records exist. The book was first published in 1635.

Foxe, in discussing the probabilities of the passage, did what men are prone to do in such cases; he accepted the opinions of those whose theories lent themselves to his purpose, while he passed over bits of evidence tending to shake his position. In this particular case he gave preference to the ideas of Briggs, based on the information gathered by Sir Thomas Button, over the more recent and more comprehensive reports of Baffin. Briggs on his part was largely

instrumental in securing for Foxe the necessary backing for his journey, and Foxe, highly delighted at the opportunity thus offered him of realising his life's ambition, seized it without a moment's hesitation. Briggs introduced Foxe to Sir John Brooke, who in turn succeeded in interesting a number of influential men in the proposed expedition, among whom was that great patron of Arctic exploration, Sir John Wolstenholme.⁴⁰ Foxe, Briggs and Brooke then proceeded to draw up a petition which they presented to the King in December, 1629, or in January of the following year, requesting the loan of a vessel and the royal sanction for the enterprise. Before granting the request the petition was forwarded to Sir Thomas Button for his expert opinion on the possibility of success. Button replied in February, expressing the greatest confidence in the outcome of the enterprise. He gives his verdict in the form of answers to questions propounded to him by Lord Dorchester, one of the Lords of the Admiralty, namely, "whether there be any likelihood or probability to compass the design, yea or no," and "whether it may prove of such benefit and advantage as is pretended?" His replies, favourable, of course, contain no arguments of weight; they are merely expressions of intense conviction in the existence of the passage and of its value to English commerce. While admitting the failure of previous expeditions, Button points to their value for future explorers in eliminating unprofitable leads. "For now," he says, "there will be no falling into Hudson's Bay, nor Button's Bay, to mispend time, as both he [Hudson] and I did to no purpose, and that only by instructions out of England; but as soon as he [Foxe] comes to the west part of Nottingham Island where he is to anchor, and, according to the set of that tide which he shall find there, [he shall find it well] to direct his course; which must be and is the only way to find that passage, which I do as confidently be-

lieve to be a passage as I do there is on[e] either between Calais and Dover or between Holy Head and Ireland.”⁴¹ The King, in compliance with the request of the petitioners, granted their demand and assigned to them a pinnacle of seventy tons, called the *Charles*, together with the necessary supplies, to enable them to start their voyage in the spring; but matters were unavoidably delayed, and the journey was postponed until the following year. When preparations were finally completed King Charles summoned Foxe before him and presented him with a map showing the previous discoveries, a set of instructions for his guidance on the way, and the inevitable letter to the Emperor of Japan that formed part of every explorer’s necessary equipment.

Meanwhile a rival expedition was being organised by the merchants of Bristol. For some time past Captain William James, an experienced navigator, who now comes upon the scene for the first time, had been, so he himself tells us, greatly importuned by his friends to attempt the passage, a feat which, if successfully carried out, he believed would be pleasing to the King. James acquainted the merchants of Bristol with this suggestion and they freely offered to pay the expenses of the undertaking. They were goaded on by a dread of seeing themselves outstripped by the merchants of London who were backing Foxe, and they also feared to lose the benefits which a discovery of the strait would bring to British commerce. The Company of Merchant Venturers of Bristol therefore dispatched James with a letter to Sir Thomas Roe requesting his assistance in forwarding their enterprise. Roe, who was already engaged in arranging the expedition under Foxe, replied to the Mayor of Bristol, pointing out to him that the King had made his plans to aid the merchants of London, “but,” he adds, “his Majesty is so just a Prince, and so gracious to encourage and reward all virtuous actions, that I am persuaded he will

make no difference between his subjects, but [will] indifferently proceed to animate you as well as any other, and that he will be glad that you shall go forward, and that the action be strengthened by your endeavour." ⁴² The King, it appears, was not in London when Captain James arrived, hence Roe's letter, while encouraging, was necessarily noncommittal, for although the writer ventured to say that whatever rights in the form of a patent which might be extended to the merchants of London would also be granted equally to those of Bristol, he gave no definite promise. Roe's opinion was endorsed by the Lord Treasurer, Richard Weston. Roe's letter shows clearly the interest which the King and his officers took in the discovery of the passage, an interest that was unselfish from the point of personal gain, and was clearly expressive of a desire to advance the commercial welfare of the kingdom. The Bristol merchants were greatly pleased, but, being cautious as well as enthusiastic, they warned James that their subscriptions to date were only eight hundred pounds, and that he should not commit them to the freighting of a vessel before they knew what commercial privileges were to be granted to them. "Therefore," they said, "we advise you to be very cautious how you engage us and yourself to be ready this spring, unless his Majesty's pleasure in the business be delivered within a few days, and that you are assured to get a fit ship in London if we fail here." The merchants then dispatched James to the Lord Treasurer with a letter inquiring what patent had been granted to the merchants of London and asking for one containing equal privileges for themselves. James on reaching London succeeded in getting an audience with the King. The time was propitious, for the King was inclined to be kindly disposed towards the town of Bristol because of the active assistance its citizens had given him in the recent war with Spain. The captain presented Charles with a peti-

tion announcing that the merchants of Bristol had determined to send out a ship for the discovery of a passage to the South Sea, and in return for this they requested the same privileges be granted them as had been given to their colleagues of London. The petition was favourably received, and under date of February 3, 1631, James was informed that the King was graciously pleased to grant the petitioners equal rights with the adventurers of London, with the proviso that if either of the groups should discover the strait the other should also have the privilege of using it. The necessary money was at once subscribed, and a ship of eighty tons was chartered and put in commission; but the merchants refrained from taking out a patent, being satisfied for the present with the King's answer to their petition. Thus the two expeditions, the one under James and the other under Foxe, were arranged simultaneously and with a commendable absence of the petty rivalry and bickering that had been so conspicuous in the dealings between the Muscovy and East India Companies thirty years before.

Foxe sailed from Deptford in the *Charles* on May 5, 1631, and headed to the northwest. He reached the North Foreland of Frobisher Bay six weeks later, then standing southward, rounded Resolution Island and entered Hudson Strait. After passing through the strait he took a southerly slant in order to leave Nottingham and Coats Islands on his starboard side, then turning boldly northwest he headed for the promontory on the mainland at the entrance of Roe's Welcome, which is known to-day as Whale Point. This course was in accordance with instructions ordering him to steer from Cary's Swan's Nest, at the southeastern tip of Coats Island, northwest by north, so as to strike the western side of the bay at 63° , and from this point to sail cautiously southward, exploring the shore as far as the entrance to James Bay. This he proceeded to do, anchoring frequently

for the night, when the nights began to grow longer, lest he should pass some strait or inlet that might prove to have possibilities. Eventually he arrived at Port Nelson, where he put in for the purpose of overhauling his vessel and in the hope of getting some information regarding the sources of the great rivers flowing into this bay. Landing, he found to his surprise various articles left there by Sir Thomas Button, including a cross, which he caused to be erected again, and he took possession of the land in the name of King Charles, bestowing on it the name of New Wales. Leaving Port Nelson, Foxe pushed southward. When he came to the mouth of the Wai-nusk River, half way between Port Nelson and the entrance to James Bay, he met Captain James.

James had sailed from England three days before Foxe in the *Henrietta Maria*, a vessel of about seventy tons, renamed after the Queen Consort. His expedition was well organised. Much care was taken in the selection of the crew and no expense was spared in obtaining the best possible mathematical instruments for making observations. Taking leave of his friends at Bristol, James crossed the Atlantic, sailed through Hudson Strait, and came to Nottingham Island. Here he found himself blocked by ice against any northward progress, so he sailed southward around Mansfield Island, and then struck across the bay to the western shore. Here he turned southward and cruised along the coast until he met Captain Foxe. The two commanders exchanged courtesies. Captain James invited Foxe on board his vessel and feasted him "with variety of such cheer as his sea provisions could afford, with some partridges." While dinner was being served the wind sprang up, "during which time the ship," Foxe tells us, "but in two courses and main bount, threw in so much water as we could not have wanted sauce if we had had roast mutton." Foxe, it appears, was

not impressed with his host's abilities as a seaman. "Our discourse," he says, "had been to small purpose, if we had not pried into the errors of our predecessors. And (being demanded), [I said] I did not think much for his keeping out his flag; for my ambition was more ethereal, and my thoughts not so airy, so to set my sight towards the sky, but when I either called to God or made celestial observation. To this was replied, that he was going to the Emperor of Japan, with letters from his Majesty, and that, if it were a ship of his Majesty's of forty pieces of ordnance, he could not strike his flag. 'Keep it up then,' quoth I, 'but you are out of your way to Japan, for this is not it.' " ⁴³

In discussing the course he intended to take Foxe told James his instructions were to explore the region northwest of Nottingham Island after he had skirted the western coast of the bay, as he was now doing, as far as Hudson's most westerly point, which would be the entrance of James Bay. Taking leave of Captain James, he now proceeded to put his orders into execution, and sailed eastward to the promontory known to-day as Cape Henrietta Maria, a point where the coast drops abruptly southward, opening up James Bay. This cape he named Wolstenholme's *Ultimum Vale*, firmly believing that after this voyage Wolstenholme would lay out no more money on expeditions to the bay, and in this Foxe was correct. He now turned northward, striking directly across the bay to the western entrance of Hudson Strait, and continued on his course until he had entered the body of water northwest of Nottingham Island and west of Baffin Land, which was later called after him, Fox Channel. Foxe sailed up the eastern shore of the channel to a point just above the Arctic Circle, then as the nights became too long to permit safe navigation, he doubled his tracks and turned for home, reaching England on the thirty-first of October.

James followed Foxe eastward along the coast to Cape Henrietta Maria. Here their routes parted, Foxe going northward, as we have said, while James explored and wintered in the bay that bears his name. The following spring he retraced his course along the western coast of Hudson Bay, going as far north as Cape Esquimaux, at which point he struck eastward across the bay to Coats Island. Rounding the island, he turned northward into Fox Channel, cruising along its western instead of its eastern shore as Foxe had done the previous year, until he came to latitude $65^{\circ} 30'$. Blocked by ice at this point, he was forced to abandon any thought of further exploration and to return to England.

The two expeditions had failed; nothing new had been discovered save a more definite knowledge of Hudson Bay. It was at last realised that the Northwest Passage, while perhaps a geographical fact, was probably a commercial impracticability. Foxe, unfortunately, fell under the displeasure of Sir Thomas Roe for having sailed into Hudson Bay instead of first attempting to find the strait through Fox Channel by going beyond Cape Comfort on the northern shore of Southampton Island; and in dealing with the cruise along the eastern shore of the channel Sir Thomas says with some asperity and a certain amount of logic: "But I never knew men to seek a northwest passage on a north-east shore; nor do I believe that there is any channel from *Fretum Davis* [to Fox Channel], nor that so much water as doth dilate itself into so great a bay can make the tide rise four fathom in any place that is not a strait, coming in as Hudson's Strait, where in no place it riseth more." ⁴⁴ Foxe justified his actions in a discussion which he drew up of the possibilities of a passage. In this account he excuses himself for not going northwest from Nottingham Island on the ground that he was blocked by ice from the time he entered Hudson Strait. As the channel between Salisbury Island

and Cape Pembroke on Coats Island was in the same ice-choked condition in which he had found the waters between Salisbury and Baffin Land, he had decided to steer southwesterly and make a general survey of the bay until the ice in these places had dissolved. In discussing the possibilities of a strait, Foxe makes a careful analysis of the tides which others, as well as he, had observed, and he concludes that the tide he found at Roe's Island, near the entrance to Roe's Welcome, would lead him to the South Sea. After summing up his arguments forcibly, for the public, he evidently thought, had become sceptical of the passage, he consoles himself with the reflection that the quantity of whales in these regions would continually lure skippers to venture into these waters, then, he says, "they will be persuaded [to] inquire after the tide, and at length [will] bring home the good news (which I expect) of this so long sought for [passage]."

James, on the other hand, held different views. He expresses his disbelief in the existence of a passage for the following reasons: The tide shows a constant ebb and flow running from the Atlantic through Hudson Strait, and this acts like other tides under similar circumstances. No evidence can be found in the bay of a current, other than the ebb and flow of the tide, which would indicate the presence of a strait; the ice at $65^{\circ} 30'$, since it lies in a field, indicates shoal water ahead, otherwise, if there were the deep water of an ocean beyond, it would be broken up as it is in Hudson Strait. Even if there were a passage, James reasons, it would be choked with ice and useless, or it would be navigable only in August and September. The route by Cape of Good Hope is by far the more practical one, and though the distance be longer than a northwest passage it is shorter in point of time.

Captain James returned to England in 1632. The fever

that had risen at the discovery of Hudson Bay in 1610 burned itself out with the realisation that the vast ocean beyond Labrador which Hudson was thought to have discovered was in truth but a gigantic landlocked bay with no outlet in the west and probably with none, at least of any practical value, to the north. The route to China in this direction was now abandoned and no vessel entered the bay until 1668, when Captain Gilliam, sailing under the orders of Prince Rupert, came to establish a trading post without any serious thought of finding a passage. Maps of the seventeenth century for the most part show an impenetrable barrier of land stretching up the western shore of Hudson Bay and around Baffin's Bay to Greenland, thus cutting off any access to the Western Sea; and so the problem remained until the English reopened it in the eighteenth century, and again attempted to pierce the northwestern barrier. But this is in anticipation of our story. We must now turn our eyes southward and glance at the efforts of the English and French to find a water route that would lead them to the Pacific through the wilderness of Virginia and New France.

CHAPTER IV

THE ROUTE TO THE WESTERN OCEAN THROUGH VIRGINIA

Jean Ribaut in Florida.—Ralph Lane investigates rumours of a sea west of Virginia.—Treatise of Edward Hayes.—Colonisation of Virginia under the London Company.—Hakluyt urges discovery of a route to the Western Ocean across Virginia.—John Smith questions the Indians on the subject.—He explores Chesapeake Bay.—Report of Francis Maguel.—Henry Briggs's *Treatise*.—*Relation* of Edward Waterhouse.—Dermer's expedition in Long Island Sound.—Captain Yong in Delaware Bay.

THE journey of Verrazano along the eastern seaboard of the North American Continent, while it disclosed nothing that would indicate the existence of a strait, had given rise to the legend of a narrow isthmus between Florida and New France. This legend found its way in modified forms into many sixteenth century maps, until a belief in the close proximity of the South Sea to the Atlantic Ocean became widespread among explorers and certain groups of geographers. As a result we find a continual insistence on the part of those exploring the regions where the isthmus was supposed to lie, for the discovery of a route (a river route rather than a water passage) which would enable them to reach the Pacific Ocean by a comparatively short journey. The story begins in the middle of the sixteenth century with the French in Florida, and carries us for a century or more through the activities of the English colonisers in the modern state of Virginia.

Jean Ribaut, a worthy seaman of Dieppe, was dispatched in 1562 by Admiral Coligny with a group of Huguenots to found a Protestant colony in America. Embarking in two antiquated vessels in the month of February, he crossed

the Atlantic and reached the coast of Florida in latitude $39^{\circ} 30'$, where he turned northward and sailed along the coast, casting anchor at the mouth of a large stream which he called the River of May, now the St. John's river.¹ Landing at this place, Ribaut inquired of the Indians about the location of Cibola, the wealth of whose seven cities had been described in glowing terms by Marcos de Niça, a Spanish missionary who had penetrated far to the north of Mexico, where this province was said to be. Cibola, Ribaut well knew, lay towards the South Sea, and his assumption that Indians dwelling along the Atlantic coast might know of its whereabouts clearly shows the prevailing ignorance of the breadth of the American Continent. Ribaut was undoubtedly influenced by the legend of the Sea of Verrazano, which sea he confounded in a general way with the Pacific Ocean. The Indians were, of course, ignorant of the location of Cibola. They understood by his query, if they understood it at all, a request for the location of a region where precious metals might be found, as Ribaut had been careful to give this as the reason for his interest in that country. To a request for gold the savages were able to give a ready answer. "They showed us by signs," says Ribaut, "that which we understood well enough, that they might go thither [to the place where gold could be found] with their boats (by rivers) in twenty days. They that have written of this kingdom and town of Seuola [Cibola], and other towns and kingdoms thereabouts, say, that there is great abundance of gold and silver, precious stones, and other great riches: and that the people had their arrows headed (instead of iron) with sharp pointed turquoises."² Ribaut had no opportunity to test the truth of this information as he presently returned to France, followed a few months later by the despairing colonists he had left behind him to effect a permanent settlement.

Two years later a second expedition was sent out under René Laudonnière, which settled near the entrance to the River of May, where they erected a fort. Laudonnière does not appear to have bothered himself about a route to the South Sea, or even about the mythical Cibola. He was, however, able to gather more definite information of the reputed gold and silver deposits which, as he learned from the Indians, were located, not in distant Cibola, but in the neighbouring Appalachian Mountains. "And because," writes Laudonnière, "the mountain was not past five or six days' journey from our fort, lying toward the northwest, I determined as soon as our supply should come out of France, to remove our habitation unto some river more toward the north, that I might be nearer thereunto."³

These excerpts from the narratives of Ribaut and Laudonnière would merit scant notice were it not for a map drawn by Jacques Le Moyne, a companion of the latter.⁴ The chart in question shows the peninsula of Florida with a considerable section of the territory adjoining it on the north. The northeastern portion of Florida blends into the isthmus connecting it with the northern part of the continent, while the Sea of Verrazano, or rather its southern shore, is shown at the extreme top of the map. The Appalachian Mountains fringe this southern shore, and from them flow rivers to the Atlantic Ocean. Le Moyne mentions on his sketch the story of the precious metals found in these mountains which the Indians told to Laudonnière. This map, the work of one who had himself surveyed a portion of the region and conversed with the natives, gives evidence of the popular belief in the proximity of a western sea above the Gulf of Mexico, or at least of a bay connecting with this sea. The map was not published until 1591, but the geographical conceptions brought home by the survivors of the expeditions of Ribaut and Laudonnière served to keep alive

the legend of a not far distant western sea. The destruction of Laudonnière's colony by the Spaniard, Menendez, discouraged any further enterprise in Florida on the part of the French, and the murder of Admiral Coligny in the massacre of St. Bartholomew removed the mainspring of Huguenot colonisation. After that we find no voyages of importance until we come to the work of exploration undertaken by the colonists of Sir Walter Raleigh.

Raleigh had ever been an ardent advocate of colonisation in America as a means of promoting the prestige and increasing the wealth of England. During the reign of Queen Elizabeth he broke away from the popular commercial policy of enrichment by trade with the Far East, and determined to exploit the New World instead of spending his energy on fruitless attempts to find the Northwest Passage. His first colonial effort under Captains Amadas and Barlowe in 1584 was merely a reconnoitring expedition, but the following year he dispatched a substantial fleet of seven vessels under Sir Richard Grenville and Ralph Lane. The company under these leaders numbered one hundred householders, among whom was the mathematician, Thomas Hariot. Grenville landed at Roanoke Island, where he disembarked the colonists, leaving them under the command of Lane while he returned to England. Lane was greatly interested in the country about him, and made several voyages up the rivers in his vicinity. While on one of these expeditions he heard strange and interesting reports of the source of the Roanoke River, or, as it was then called, the Moratoc. "From Moratoc itself," he writes, "which is the principal town upon that river, it is thirty days as some of them [the Indians] say, and some say forty days voyage to the head thereof, which head they say springeth out of a main rock in that abundance, that forthwith it maketh a most violent stream: and further, that this huge rock standeth

so near unto a sea, that many times in storms (the wind coming outwardly from the sea) the waves thereof are beaten into the said fresh stream, so that the fresh water for a certain space groweth salt and brackish.”⁵ Nothing more was needed to start Lane on a journey of discovery. Taking with him a company of forty men and two boats, he ascended the Roanoke to investigate the truth of this report. The voyage was tedious, but the adventurers refused to turn back until they had exhausted all their provisions, including two dogs which they cooked with sassafras leaves, “the like whereof for a meat,” says Lane, “was never used before as I think.” The voyage was, of course, unsuccessful. The source of the Roanoke was not found, nor were the explorers able to discover any trace of the province where the Indians said a “marvellous and most strange mineral” could be found. Nevertheless, the expedition appeared important to Lane, and for this reason he gives a somewhat detailed account of it in his letter to Hakluyt. The voyage gave promise, so he thought, of the possibility of finding a gold mine or a passage to the South Sea, for nothing else, he believed, would induce the English to colonise America. In regard to the possibility of a passage or route to the South Sea, he says: “This river of Moratico [Roanoke] promiseth great things, and by the opinion of M. Hariot’s the head of it by the description of the country, either riseth from the bay of Mexico, or else from very near unto the same, that openeth out into the South Sea.”

A route to the Western Sea and the existence of gold or silver mines were objects bound to excite the interest and cupidity of others besides the English. Francis Drake reported to Hakluyt a conversation he had held with one Pedro Morales of St. Augustine, Florida, who had learned from the Indians rumours of these two objectives. Some three-score leagues north of St. Helena at the mouth of the

Broad River in South Carolina, he said, were the gold and crystal mines of the Apalatci or Appalachian Mountains. The savages also told of a great city sixteen to twenty days' journey from St. Helena. "They [the Spaniards]," quoted Drake, "have offered in general to the King [Indian chief] to take no wages at all of him, if he will give them leave to discover this city, and the rich mountains, and the passage to a mighty sea or lake which they hear to be within four and twenty days' travel from St. Helena, which is in 32 degrees of latitude: and is that river which the French called Port Royal." ^a

Such reports, outlandish as they may seem to modern ears, were not fabricated out of whole cloth, but were based on a certain amount of truth, as may be seen when due allowance is made for the difficulty experienced by the Indians in understanding what the Europeans were driving at, and the natural tendency of the latter to interpret the information they received in the light of their own preconceived ideas. Gold, indeed, could be found, and a small quantity has actually been mined in the Appalachian Mountains. But did the Indians always understand by the word "gold" the same thing as did the Europeans? Ralph Lane throws considerable light on this question when he speaks of the mineral which the Indians told him he could find in the country of Chaunis Temoatan. "The mineral they say is *wassador*," writes Lane, "which is copper, but they call by the name of *wassador* every metal whatsoever: they say it is of the colour of our copper, but our copper is better than theirs; and the reason is for that it is redder and harder, whereas that of Chaunis Temoatan is very soft, and pale: they say that they take the said metal out of a river that falleth very swift from high rocks and hills, and they take it in shallow water." It was natural for Lane to assume from this description that gold was the metal found in

Chaunis Temoatan, and, in truth, gold may have been the metal which the Indians found there, for the mineral was not so red in colour nor so hard in substance as the copper of the English, and from the Indians' point of view it was not so valuable a material. But as Lane goes on to say that the Indians have such a great store of this metal that they "beautify their houses with great plates of the same," the substance was more probably pyrite or fool's gold, a mineral which deceived the Virginia colonists when they first settled on the shores of the Chesapeake. Likewise the rumour of the great sea or lake situated twenty-four days' journey from St. Helena is, we believe, the first record of the Great Lakes (in this case presumably Lake Erie) to reach the ears of Europeans settled along the Atlantic Seaboard. The Indians, as might be expected, would be prone to confuse a large fresh-water body with the ocean, and ready to tell the Europeans in perfect good faith of the existence of a sea far to the northward, particularly when knowledge of this sea was something that they had gleaned only at second-hand from tribes living farther inland. George Popham heard a similar account from the savages when he settled at Sagadahoc at the mouth of the Kennebec. The Indians there assured him of the location of a sea in the western part of his province, distant about seven days' journey from Sagadahoc. It was described as large, wide and deep, and Popham concludes that it can be no other than the southern ocean "reaching to the regions of China." ⁷ The natives probably referred to Lake Ontario.

From these trifling bits of news the English formed great hopes of piercing the barrier in the middle latitudes. In the reign of Queen Elizabeth a jeweller, named Apsley, expressed the hope of seeing the day when a letter would be carried to China in three months by a route across the continent between 43° and 46° . The idea of an open pas-

sage through North America in this locality, such as the Northwest Passage, was not seriously considered at this time. English geographers and explorers leaned rather to the belief that a river, or, better, some rivers, could be ascended to their sources, which would lie near the Western Sea or, at any rate, open some line of communication with it. An excellent summary of the popular view is found in a treatise by Edward Hayes, published in 1602 as an appendix to Brereton's account of the voyage of Bartholomew Gosnold along the coast of New England. It is based more on scientific reasoning than on the fabulous reports gleaned from the Indians, and it shows the reasons which later induced Captain Smith and the London Company to expect to find a route through Virginia. Hayes was interested in promoting a colony in America, and he gives in his treatise the usual list of benefits that would accrue to the mother country by the development of the natural resources of the New World. "I will add hereunto," he writes, "an assured hope (grounded upon infallible reasons) of a way to be made part overland, and part by rivers and lakes, into the South Seas unto Cathay, China, and those passing rich countries, lying in the east parts of the world: which way or passage (supposed to be beyond the uttermost bounds of America, under the frozen zone) is nevertheless, held by the opinion of many learned writers and men of judgment now living, to be in these more temperate regions; and that the same shall never be made known, unless we plant [colonise] first; whereby we shall learn as much by inquisition of the natural inhabitants, as by our own navigations. I will not herein rely upon reports made in the Frenchmen's discoveries; that the sea which giveth passage into Cathay, extendeth from the north, near unto the river of Canada, into 44 degrees, where the same [river] of the savages is called Tadonac [Tadoussac]. . . . For this we know

already, that great rivers have been discovered a thousand English miles into that continent of America; namely, that of St. Lawrence or Canada. But not regarding miles more or less, most assuredly, that and other known rivers there do descend from the highest parts or mountains, or middle of that continent, into our north sea. And like as those mountains do cast from them streams into our north seas; even so the like they do into the South Sea, which is on the back of that continent. For all mountains have their descents toward the seas about them, which are the lowest places and proper mansions of water: and waters (which are contained in mountains, as it were in cisterns), descending naturally, do always resort unto the seas environing those lands. . . . Seeing then in nature this cannot be denied, and by experience elsewhere is found to be so, I will show how a trade may be disposed more commodiously into the South Sea through these temperate and habitable regions, than by the frozen zones in the supposed passages of northwest or northeast: where if the very moment be omitted of the time to pass, then are we like to be frozen in the seas or forced to winter in extreme cold and darkness like unto hell: or in the midst of summer, we shall be in peril to have our ships overwhelmed or crushed in pieces by hideous and fearful mountains of ice floating upon those seas. Therefore four staple-places must be erected, when the most short and passable way is found: that is to say, two upon the north side, at the head and fall of the river; and to others on the south side, at the head and fall also of that other river. Provided, that ships may pass up those rivers unto the staples, so far as the same be navigable into the land: and afterwards, that boats with flat bottoms may also pass so high and near the heads of the rivers unto the staples, as possibly they can, even with less than two foot water, which cannot then be far from the heads; as in the river of Chagre. That neck or

space of land between the two heads of the said rivers, if it be one hundred leagues (which is not like) the commodities from the North and from the South Sea brought thither, may well be carried over the same upon horses, mules, or beasts of that country apt to labour (as the elk or buffel [buffalo]) or by the aid of many savages accustomed to burdens: who shall stead us greatly in these affairs. It is moreover to be considered, that all these countries do yield (so far as is known) cedars, pines, fir trees and oaks, to build, mast, and yard ships; wherefore we may not doubt, but that ships may be builded on the South Sea. Then as ships on the south side may go and return to and from Cathay, China, and other most rich regions of the east world in five months or thereabouts; even so the goods being carried over unto the north side, ships may come thither from England to fetch the same goods, and return by a voyage of four or five months usually. So in every four months may be returned into England the greatest riches of Cathay, China, Japan, and the rest which will be spices, drugs, musk, pearl, stones, gold, silver, silks, cloths of gold, and all manner of precious things, which shall recompense the time and labor of their transportation and carriage. . . . But this passage over and through the continent of America, as the same shall always be under temperate and habitable climates, and a pleasant passage after it hath been a little frequented: even so it must fall out much shorter than it seemeth, by false description of that continent, which doth not extend so far into the west as by later navigations is found and described in more exquisite charts. Besides that, the sea extends itself into the land very far in many places on the south side: whereby access into the South Ocean, shall be by so much the shorter.”⁸

There were those, then, who thought the proper route to the South Sea lay across the American Continent, and that it

was to be found by exploring the various rivers which debouched into the Atlantic. Hayes's *Treatise* is an admirable summary of this theory of the passage. Presumably those who advocated it were satisfied with Verrazano's map which showed the continent in an unbroken line from the southern tip of Florida to the Baccalaos. The search for a route to the Western Sea by those whose activities we are about to discuss was confined to a search for a suitable river leading to a watershed, beyond which could be found some stream flowing into that ocean. This Western Sea, it was believed, was not far from the Atlantic Seaboard, for the Virginia and Florida Indians, according to Hessel Gerritz, distinctly stated that their country was washed on its southwestern side by a vast ocean, on which they had seen ships similar to those of the English. In this case the sea referred to is clearly the Gulf of Mexico.

The work begun by Sir Walter Raleigh now bore fruit. Colonisation, with search for the South Sea as a side issue, started in earnest. James I at the request of Richard Hakluyt and other distinguished gentlemen issued a charter in 1606 to the London Company, granting them the privilege of establishing a plantation on the American coast. Under this patent the adventurers dispatched three vessels: the *Susan Constant* under Christopher Newport, the *Godspeed* under Bartholomew Gosnold, and the *Discovery* under John Ratcliffe. Among the passengers, and occupying an important position, was Captain John Smith. To Captain Newport was confided the instructions issued by the King for the government of the colony, with strict orders not to open them until the party had arrived at its destination. On reaching Chesapeake Bay the seal was broken and the packet was found to contain a list of those who were to become councillors of the colony, and also detailed instructions for the exploration of the locality where they were to

establish their home. These instructions may have been drawn up by Richard Hakluyt, who had done similar work for the East India Company; at any rate, the keen interest shown by the author in the acquisition of geographical knowledge, especially in regard to the Western Sea, is presumptive evidence of his influence. "When it shall please God to send you on the coast of Virginia," runs the document, "you shall do your best endeavour to find out a safe port in the entrance of some navigable river, making choice of such a one as runneth farthest into the land, and if you happen to discover divers portable rivers, and amongst them any one that hath two main branches, if the difference be not great, make choice of that which bendeth most toward the northwest for that way you shall soonest find the other sea." ⁹

Clearly Hakluyt was keen in his desire to find a route, so keen, in fact, that he was anxious to have the settlers make it the prime factor in their selection of a river on which to plant their colony. Nor is this surprising in a man who later regarded the proximity of the South Sea as the principal advantage to be derived from Virginia. After making a settlement, the instructions continued, Newport and Gosnold were to take forty men and explore the river for two months. The document then becomes explicit as to the manner in which this exploration is to be undertaken, for its author says: "When they do espy any high lands or hills, Captain Gosnold may take twenty of the company to cross over the lands, and carrying a half dozen pickaxes to try if they can find any minerals. The other twenty may go on by river, and pitch up boughs upon the bank's side, by which the other boats shall follow them by the same turning. . . . You must observe if you can, whether the river on which you plant doth spring out of mountains or out of lakes. If it be out of any lake, the passage to the other sea will be more

easy, and [it] is like enough, that out of the same lake you shall find some spring which runs the contrary way towards the East India Sea; for the great and famous rivers of Volga, Tanais and Dwina have their heads near joined; and yet the one falleth into the Caspian Sea, the other into the Euxine Sea, and the third into the Pælonian [White] Sea."

As the eventual economic development of Virginia was the growth of tobacco on a large scale, we are apt to lay too much stress on this industry during the first decade of colonisation, and to forget how different were the conditions in the first plantation when the colonists founded it. The raising of tobacco as a source of wealth was a factor that never entered the minds of the adventurers who received the first charter from King James, nor, for that matter, did tobacco play an important part in the life of Virginia until some time later. A plantation was to be established in Virginia for the purpose of enriching the mother country, and this purpose could best be effected by discovering mines of gold or silver, by growing commodities indigent to the warmer climates of Spain and France, and last, but not least, by opening a route to the Pacific. Other objects, such as relieving England of her surplus population and establishing a naval base near the Spanish possessions, should also be mentioned.

Shortly after the new colony was established at Jamestown on the banks of the James River, Newport, having fitted out a boat with the necessary provisions, took with him "five gentlemen, four mariners, and fourteen sailors, with whom he proceeded with a perfect resolution not to return, but either to find the head of this river, the lake mentioned by others heretofore, the sea again, the mountains Apalatsi, or some issue." Proceeding up the stream, he presently met an Indian, from whom he obtained a sketch showing how far the river was navigable. Further on he reached a spot

where he learned that a little farther up the James divides itself into two branches, both of which come from the Quirauk or Blue Ridge Mountains. Newport explored his river as far as the site of modern Richmond, at which point he decided to abandon further search and go back to the settlement. Shortly after his return to Jamestown he sailed for England with a small supply of gold and a large amount of pyrite to astonish the Company in London, leaving the work of exploration to be carried on by that adventurous spirit, Captain John Smith.

Smith threw himself heartily into the task. The geographical results of Newport's expedition had disclosed nothing encouraging. We can find in letters written after Newport's return to England no reference to the South Sea; but this is perhaps because the gold and pyrite engrossed the attention of the writers, who were too busy expressing their disappointment at the paucity of the supply—we refer, of course, only to the gold—to concern themselves with geography. Towards the close of 1607 Smith, accompanied by a small detachment, made his first voyage of exploration. He ascended the Chickahominy as far as his boat would carry him, then, leaving the river, started overland. Near White Oak Swamp he was attacked by a band of Indians who led him captive before their chief, Powhatan, at Werowocomoco. Questioned as to why he had ventured thus far, Smith replied that he was searching for an Indian whom he believed had murdered a son of Newport, and in turn he addressed some queries to Powhatan regarding a western ocean. "After good deliberation," writes Smith in his *True Relation*, "he [Powhatan] began to describe [to] me the countries beyond the Falls [of the James], with many of the rest; confirming what not only Opechancanoyes, and an Indian which had been prisoner to Powhatan had before told me: but some called it five days, some six, some

eight, where the said water [of the sea] dashed amongst many stones and rocks, [during] each storm; which caused oft times the head of the river to be brackish: Anchanachuck he described to be the people that had slain my brother:¹⁰ whose death he would revenge. He described also upon the same sea, a mighty nation called Pocoughtronack, a fierce nation that did eat men, and warred with the people of Moyaoncer and Pataromerke, nations upon the top of the head of the bay [Chesapeake], under his territories: where the year before they had slain an hundred. He signified their crowns were shaven, long hair in the neck, tied on a knot, swords like poleaxes. Beyond them, he said, were people with short coats, and sleeves to the elbows, that passed that way in ships like ours. Many kingdoms he described [to] me, to the head of the bay [Chesapeake], which seemed to be a mighty river issuing from mighty mountains betwixt the two seas: The people clothed at Ocamahowan, he also confirmed; and the southerly countries also, as the rest that reported us to be within a day and a half of Mangoge, two days of Chawwonock, six from Roonock, to the south part of the back sea: He described a country called Anone, where they have an abundance of brass, and houses walled like ours.”¹¹

After Newport's return to Virginia messengers came from Powhatan bringing gifts of food for Smith and Newport and expressing the Indian's desire to have the Englishmen pay him a visit. The two captains therefore determined to go to Werowocomoco, and embarking with a few followers they sailed down the James and up the York River to Poetan Bay, whence they made their way to Powhatan's establishment. Several days were spent in feasting and exchange of courtesies, then the Englishmen broached to Powhatan their purpose in extending their explorations farther westward. The Indian understood by this that they desired to

invade Monacum, a country situated beyond his domains, and he accordingly offered to dispatch his men to join the expedition and to assist also by sending spies ahead. Newport, eager to undertake this adventure for the purpose of discovering the South Sea, was ready to accept Powhatan's terms, but Smith, who distrusted the Indian, persuaded him to renounce the idea.

When the news reached England that a route to the South Sea had been discovered, or, to speak more accurately, its location had been learned, it created a great sensation at the headquarters of the London Company. Captain Newport carried to England the first report of the alleged discovery when he sailed from Jamestown in April, 1608. Shortly after Newport reached England, came Captain Nelson with Smith's *True Relation* and his map illustrating the scene of his explorations in Virginia. At the same time Nelson brought with him letters and maps from Smith to Henry Hudson, who, as the reader will remember, was at that time in Holland dickering with the Dutch East India Company. According to Van Meteren, a distinguished contemporary historian, Hudson gleaned from these documents the existence of a strait leading from the Atlantic to the Pacific near the fortieth parallel.¹² We have no copies of the letters and maps in question and the only source of our information regarding Smith's influence on Hudson is from Van Meteren. The suggestion made that the *True Relation* and the map accompanying it were the papers referred to by Van Meteren is scarcely admissible, for there is no mention in the *True Relation* of an open water route, though there are several indications of the presence of a sea beyond the sources of the Virginia rivers; and certainly there is nothing on the map that could be intended for a strait.¹³ The only notice we have of Smith's belief in an all-water passage is a statement, which will be quoted presently, that

perhaps Chesapeake Bay stretched into the South Sea. This statement was made, however, after Nelson had sailed for England with the *True Relation*. The purpose of the chart referred to above was to illustrate the geographical discoveries made in person by Smith and Newport and to convey such pertinent information on the unexplored regions as these men had been able to gather from the Indians. Chesapeake Bay is shown on the map with several large rivers running into it, while the bay itself ends in a stream running parallel to them. At the sources of these rivers are inscriptions, only partially decipherable, referring to certain passages in the text of the *True Relation*.

Newport gone, Smith devoted himself to voyages of discovery on his own responsibility. He left the fort at Jamestown in June, 1608, for the purpose of locating a mine which he had heard about, of studying native products, and of ascertaining how far inland Chesapeake Bay extended. This latter object shows interest in the South Sea route. The party crossed the bay from Cape Henry to Smith's Island, where they turned up the shoreline, examining every inlet, bay and gulf that came under their notice. The land they uncovered did not prove promising; it was broken up by small islands, while the scarcity of fresh water at length compelled the explorers to turn back to the western shore. Hardships caused dissatisfaction, and on the fourteenth of June Smith felt obliged to encourage his men by citing to them the laudable conduct of Ralph Lane's men who refused to turn back until every available supply was exhausted. Two days later they entered the Potomac River. Impressed by its great breadth, they sailed boldly up the stream, meeting from time to time with Indians by whom they were kindly treated. After sailing for some distance, they were led by an Indian chief to a mine where they found a substance resembling antimony, but this unfortunately

proved upon analysis to be a metal of little value. Returning thence to Jamestown, Smith paused on his way to examine the lower reaches of the Rappahannock. On arriving at the fort Smith found the garrison sick and discouraged, "but," he tells us in his *General History*, "the good news of our discovery, and the good hope we had by the savages' relation, that our bay had stretched into the South Sea, or somewhat near it, appeased their fury; but conditionally that Ratcliffe should be deposed, and that Captain Smith would take upon him the government, as by course it did belong." It is in this passage we find the hint—the only one in the writings of Smith that have come down to us—of the possible connection of the Chesapeake Bay with a western ocean.

Smith, buoyed up by the hope of finding the much-sought-for route, did not remain long at Jamestown. He immediately organised a second expedition and sailed up the western shore of the Chesapeake. Passing by the Potomac, for he had in mind to reach the head of the bay as quickly as possible, he presently arrived at his destination where he heard for the first time of the Susquehanna Indians who dwelt in the neighbourhood. These savages, he thought, could give him the desired information. An interpreter was at once dispatched to fetch them to the English camp. When they had arrived Smith interrogated them, but found their answers far from satisfactory. "Many descriptions and discourses they made us," says the narrative, "of [the] Atquanachuck, Massawomek, and other people, signifying they inhabit upon a great water beyond the mountains, which we understood to be some great lake, or the river of Canada [St. Lawrence]; and from the French to have their hatchets and commodities by trade. These [Indians] know no more of the territory of Powhatan, than his name, and he as little of them: but the Atquanachucks are on the ocean sea."

This was all Smith could learn, and with this he had to be content. His search for a route to the South Sea was now completed as he had explored the entire length of Chesapeake Bay and had pushed his way up the western rivers far enough to know that his western ocean lay beyond a ridge of high mountains, and that the practicability of the route was open to doubt. Moreover, the sea of which Powhatan had spoken might possibly be a lake, for it was difficult to make the Indians understand the difference between a lake and a sea, besides which the Susquehannas had clearly indicated the water they referred to as a lake or river. Judge then Smith's feelings when, after his return to Jamestown, Captain Newport arrived and blandly showed him a commission ordering him (Newport) to make an attempt to find the South Sea. Indeed the commission put the matter in rather forcible terms. "How, or why," said the indignant Captain Smith, "Captain Newport obtained such a private commission as not to return without a lump of gold, a certainty of the South Sea, or one of the lost company of Sir Walter Raleigh, I know not: nor why he brought such a five pieced barge, not to bear us to that south sea, till we had borne her over the mountains (which how far they extended is yet unknown)." But, after all, Smith had only himself to blame. It was his map and his narrative that had roused hopes in England, where the business was not clearly understood; and now Smith, in a somewhat disillusioned frame of mind, would have given much to have been able to spare his colonists this unprofitable labour. In addition to these demands from the associates in London, Newport was ordered to perform the coronation of the Indian chief, Powhatan. "Now was there no way to make us miserable," laments Smith, already distraught by the critical state of his colony, "but to neglect that time to make our provision [for the winter], whilst it was to be had, the which

was done to perform this strange discovery, but more strange coronation."

To Smith's intense disgust, Newport helped himself liberally to men and supplies for his proposed expedition. Little is known of this voyage save that it was up the James River to the falls, where the explorers left their boats and made their way on foot for four days. Smith expresses his contempt for the entire proceedings in the following words: "For the charge of this voyage of two or three thousand pounds, we have not received the value of an hundred pounds. And for the quartered boat to be borne by the soldiers over the falls, Newport had one hundred and twenty of the best men he could choose. If he had burnt her to ashes, one might have carried her in a bag; but as she is, five hundred cannot, to a navigable place above the falls. And for him at that time to find in the South Sea, a mine of gold, or any of them sent by Sir Walter Raleigh: at our consultation I told them was as likely as the rest. But during this great discovery of thirty miles, (which might as well have been done by one man, and much more, for the value of a pound of copper at a seasonable time) they had the pinnace and all the boats with them, but one that remained with me to serve the fort." ¹⁴

This fruitless expedition was the last undertaken by Captain Smith, or by his companions, for the discovery of a route to the South Sea. They realised that the route, if there actually was one—and its existence was widely believed in for years to come—would be fraught with such difficulties as to render it impractical, at least during the time when the colony was in its infancy. As a summary of the information collected by Captain Smith on his various travels up the rivers of Virginia, we may quote the report of Francis Maguel, an Irishman who went to Virginia as a spy for the

Spanish government, and who used his opportunity to write a fanciful sketch of the intentions which the English had of thwarting Spanish ambitions by the discovery of a passage. Maguel obtained an accurate account of the stories told to Smith by the Indians, but he injures its value by insinuating that the English had made the discovery of a route the first, if not the only, object of their colonisation. "In the first place," he says, "the natives of Virginia assure the English that they can easily take them to the South Sea by three routes. The first route on which they will take them is by land, from the head of that river [the James], on which the English have a fort, to the South Sea, as the natives affirm [is ten days' march]. The second route is [shorter?], because [with]in a day's march and a half from the head of that river inland, there is another river so long that it falls into the South Sea. The third route is that twelve leagues from the mouth of this river [James], where the English are, toward the northwest there are four other rivers [York, Rappahannock, Potomac and Patuxent], to which there came [went?] one of those English captains [Smith] in a pinnace, who says that one of these rivers [Potomac] is of great importance, and the natives affirm, that fourteen leagues farther on from these four rivers towards the northwest there is another great river [Susquehanna], which flows very far into the country, until it meets another large river, which flows to the South Sea. The English desire nothing else so much as to make themselves masters of the South Sea in order to secure their share of the riches of the Indies and to cut off the trade of the King of Spain, and to seek new worlds for themselves. With a view to this end: to make themselves masters of the South Sea, they have determined to erect a fort at the end of every day's march of these ten days' march which lie between the

head of their river and the South Sea, to secure themselves on this route. And two other forts on that day's march and a half which lie between the two rivers." ¹⁵

Maguel's report was not taken too seriously by the Spaniards. Ambassador Velasco at the Court of St. James had kept too watchful an eye on Virginia policies, as they were directed from headquarters in London, to place any reliance on rumours of efforts made to organise the colony on a vast scale in order to seize and occupy the route to the South Sea. He well knew, as did the English adventurers, that the route was long and difficult, and that the English were in no position and in no mood to attempt it. King Philip III, on writing his ambassador regarding the statements in Maguel's report, received the following reassuring answer: "They say also that it is impossible to pass to the South Sea by the river [James] on which they have erected their two forts. By land it is more than four hundred leagues off and many mountains are there and vast deserts which the Indians themselves never yet have explored. Thus no credit can be given to what the Irishman Francisco Manual [Maguel] says in the report which your Majesty commanded to be sent to me." ¹⁶

Velasco, then, was inclined to disparage any inference that the activities of the Virginia colonists might redound to the injury of Spanish interests in the Pacific. The great distance between the two oceans, as the ambassador points out, was sufficient proof of the harmlessness of English enterprises in Virginia, at least so far as the Pacific was concerned. Besides he also believed that interest in the South Sea, and even in colonisation, was on the wane, despite the zeal of a few ardent souls who still had faith in the proximity of a western ocean. He was also advised by his agent in Virginia, Diego de Molina, of a lingering desire among the colonists "to pass beyond towards New Mexico, and

from thence to the South Sea, where they think of establishing in great colonies, and fit out fleets, with which to make themselves masters of those waters." The truth of the matter was probably this: the colony was passing through a hectic and critical period; starvation stared the settlers in the face; the ruffianly element, of which there was an unfortunate preponderance in the early days, was throwing the colony into a state bordering on anarchy; and discord was rife in the councils of the London Company at home. Whatever desire to discover the South Sea existed among the more ambitious, it must perforce be set aside until order was once more restored.

In order to sum up the geographical knowledge of Virginia in its relation to the South Sea, as it appeared to those who made a careful study of American geography and had kept themselves posted on the latest information, we turn to the *Treatise* of Henry Briggs, a document of considerable value for our purpose. The South Sea, according to this writer, lay beyond the Falls of the James on the western side of the mountains of Virginia, and opened a fair passage to China, Peru, Chili and other rich countries. "For," he says, "the sea wherein Master Hudson did winter [i.e., James Bay], which was first discovered by him, and is therefore now called *Fretum* Hudson, doth stretch so far towards the west, that it lieth as far westward as the cape of Florida: so that from the falls above Henrico City [i.e., Falls of the James], if we shape our journey towards the northwest, following the rivers towards the head, we shall undoubtedly come to the mountains, which as they send divers great rivers southward into our Bay of Chesapeake, so likewise do they send others from their further side northwestward into that bay where Hudson did winter. . . . This bay where Hudson did winter, stretcheth itself southward into 49 degrees, and cannot be in probability so far distant from the

falls as two hundred leagues; part of the way lying by the river's side towards the mountains whence it springeth: and the other part on the other side cannot want rivers likewise, which will conduct us all the way, and I hope carry us and our provisions a good part of it." Furthermore, Briggs points out, it is not unlikely the Western Sea by virtue of some creek or river comes much nearer, for the place where Thomas Button wintered is almost as far west as the cape of California. The Western Sea, in Briggs's opinion, may be nearer than one might suppose it was, judging from the general run of maps and globes which depict a large continent stretching westward to the strait of Anian, where the kingdoms of Cibola and Quivira are seated.¹⁷

Thus Briggs combines the discoveries of Hudson and Button with the stories of Indians as reported by Smith and Newport, and espouses the theory, in contradiction to the evidence of the more reliable maps, as well as the actual facts, that the continent is comparatively narrow in several places, and that access to the Pacific may be more practical than was generally supposed. Briggs's map does not show an encouraging outlook for a journey from the Atlantic to the South Sea. Taken as a whole, the chart gives the outline of the American Continent much as it is shown to-day. There is considerable breadth to the barrier, even though California is shown as an island off the western coast; and one cannot expect from this sketch to find as short a cut from the rivers of Virginia to Hudson Bay as one would be inclined to anticipate from the author's *Treatise*. Briggs appears to be somewhat non-committal when he comes to interpret the theories given in his text in graphic form on his map, for he covers the territory between the Pacific and Hudson Bay with copious notations, and fails to show any outline of the continent to support his theories. But as his theories were admittedly speculative he was, no doubt, un-

willing to commit himself too far. His map is a creditable performance and an excellent interpretation of the available material, save for the popular seventeenth century belief regarding the insularity of California.¹⁸

Failure to find sudden wealth in Virginia by the discovery of gold mines or the opening of a route to the South Sea caused great disappointment among the adventurers, and many abandoned the enterprise in despair. The undertaking then fell into the hands of "constant adventurers," men who looked for a profit derived from a gradual development of the colony's resources rather than for a quick return. The route to the South Sea therefore fell into the background. Moreover, there was also a more practical check to exploration. The Indians held the settlers in such strict confinement that they could not leave their fortifications without running into danger; and thus a feeling of discouragement fell like a blight on the colonists as well as on their financial backers. And further, the adventurers, tired of expenses which brought in no returns, were beginning to turn their attention to Bermuda, a region of great fertility, where the colonists would not be plagued by hostile savages. At this juncture, fortunately, events suddenly took a more favourable turn. The first supply of tobacco, grown by John Rolfe in 1612, reached England the following year, and despite royal opposition to the "filthy weed," its cultivation as a source of wealth took the place of the rapidly vanishing hopes of gold mines and the South Sea in the minds of the adventurers.

As interest in the outcome of the Virginia experiment rose again, thanks to the tobacco crop, there came likewise a renewed interest in the South Sea and the route to it, though this was regarded more as a speculation than as a practical venture. There seems to have been a fair unanimity of opinion as to the nature of the territory the explorers would

be obliged to traverse on their journeys, although distances derived from Indian rumours are subject to varied interpretations. William Strachey in his *Historie of Travaile* (1612 or 1616) supposes the width of Virginia from east to west to be three hundred miles in the narrowest place, and in other places one thousand, "a sufficient space, and ground enough to satisfy the most covetous and wide affection."¹⁹ The James River, according to Strachey, seemed to offer the best opportunity for a route, as it comes from a source situated far to the west. Forty miles above the falls of Richmond, he points out, it has two branches, the northernmost coming from steep and impassable mountains, while the other branch comes from high hills, "from the tops of which hills, the people say they see another sea, and that the water is there salt; and the journey to this sea, from the falls, by their account, should be about ten days, allowing, according to a march, some fourteen or sixteen miles a day."

An interesting account of the adventures that befell an English explorer at this time, and one which gave a supposed clue to the Western Sea, is found in the *Relation* published by Edward Waterhouse in 1622, in which the author tells of the journey of one Lieutenant Parkinson, who had recently made an expedition up the Potomac River. On this voyage the lieutenant saw a China box, as he calls it, in the possession of an Indian chief. Astonished at seeing an Asiatic curiosity in the hands of an Indian, he inquired whence it came. The Indian "being demanded where he had it," says Waterhouse, "made answer, that it was sent him from a king [chief] that dwelt in the west over the great hills, some ten days' journey, whose country is near a great sea, he having that box, from a people as he said, that came thither in ships, that wear clothes, crooked swords, and somewhat like our men, dwelt in houses, and were called Acanack-China: and he offered our people, that he would

send his brother along with them to that king, which offer the governor [of Virginia] purposed not to refuse; and the rather, by reason of the continual constant relations of all those savages in Virginia, of a sea, and the way to it west, [thus] affirming that the head of all those seven river[s] of Thames, [are] navigable above an hundred and fifty miles, and not above six or eight miles one from another, which fall all into one great bay [Chesapeake], have their rising out of a ridge of hills, that runs along south and north: whereby they doubt not but to find as safe, easy and good passage to the South Sea, part by water, and part by land, esteeming it not above an hundred and fifty miles from the head of the falls, where we are now planted; the discovery whereof will bring forth a most rich trade to Cathay, China, Japan, and those other of the East Indies, to the inestimable benefit of this kingdom.”²⁰ Waterhouse, who himself believed in the feasibility of finding a route to the Western Sea—in fact he gives the story as evidence to prove his opinion—reinforced his belief by appending a copy of Briggs’ *Treatise* to his *Relation*.

By consensus of opinion, then, though no one had as yet undertaken to verify the belief by personal observation, there existed a high range of mountains in the west (the Blue Ridge), beyond which, at a distance of about one hundred and fifty miles from the falls of the James, was a salt water sea. The other great rivers of Virginia also rose in these hills, and from their sources portages could be made to some westward flowing river. By this time news of Champlain’s exploits in Canada had reached the Virginians and added greatly to their hopes. The Reverend Samuel Purchas compiled a summary of conditions in the colony from letters he had received and mentions the influence of Champlain. The French explorer had ascended the St. Lawrence and the Ottawa until he had come to a great lake (Lake

Huron) which he judged to be three hundred miles long; and at the other end of it, according to the Indians whom he had consulted, salt water could be found. This, Champlain thought, would lead eventually to the Gulf of California or to some part of the South Sea. Hence communication with the west, Virginians believed, would be of great value to them, for there must surely be a river beyond the Blue Ridge, flowing into the St. Lawrence and its chain of lakes.²¹ Purchas also found material to bolster up his confidence in the possibility of a passage in a letter he received from Thomas Dermer, who in the year 1619 made a voyage to New York harbor, where he heard from the savages news which caused him to believe that he was on the track of a passage.

Dermer started from the island of Monhegan off the coast of Maine, not far from the Kennebec River, and sailed around Cape Cod. Here he was driven ashore by a storm and was taken prisoner by the natives. He escaped, and, regaining his ship, sailed up Long Island, where, he says, he nearly became embayed, but presently he reached the most westerly part at a point where the coast begins to fall off in a southerly direction. This was Hell Gate, and sailing through it he entered New York harbour. Here he talked with many savages "who," he says, "told me of two sundry passages to the great sea on the west, offered me pilots, and one of them drew me a plot with chalk upon a chest, whereby I found [that] a great island parted the two seas; they report the one [passage] scarce passable for shoals, perilous currents, the other no question to be made of. Having received these directions, I hasten to the place of greatest hope, where I purposed to make trial of God's goodness towards us, and use my best endeavour to bring the truth to light, but we were but only showed the entrance, where in seeking to pass we were forced back with contrary and overblowing

winds, hardly escaping with our lives.”²² One can only hazard a guess at the geographical features outlined in the Indian’s sketch as there is nothing in the vicinity of New York harbour which could possibly be interpreted as a passage to the Western Sea. Presumably the two seas were Long Island Sound and the Hudson River, separated by Manhattan Island, thus making two passages, one by the Harlem River, the other around the southern end of the island. Dermer after his failure went to Chesapeake Bay, proposing to return to the scene presently, but illness and the winter season compelled him to abandon his plans.

Purchas by this time was fairly confident that something could be accomplished towards solving the problem of a route through Virginia. In *Virginia’s Verger* he set forth his views on the desirability of the passage, not only for the wealth it would bring to England, but for the benefits that would accrue to Virginia from the establishment there of an entrepôt for replenishing vessels and caring for those engaged in the long and tedious voyage to the East. He urges his countrymen not to be discouraged by the failures of Hudson, Frobisher and Willoughby, and he points to the Indian reports of a route across the middle of the continent as evidences supporting his theory, which he bolsters up by the recent experiences of Dermer.²³

Besides the writings of Purchas we find those of other persons which show a decided revival of interest in the possibility of a passage at the time Virginia was made a Crown colony. From uncertainty and doubt opinion had changed to a feeling of confidence in the proximity of the South Sea or some waterway leading to it. Even Sir Edwin Sandys, who guided the Company from 1619 to the time of its dissolution, expressed a willingness to venture his life in the search. This change of feeling was not due to any increase in geographical knowledge, for the settlers had learned

nothing more than they already knew from Captain Smith's expeditions; it was due, probably, to a more hopeful outlook for the colony. During the years which immediately followed the voyages of Smith and Newport, there was a period of despondency, due partly to lack of immediate success and partly to disorganisation and intense suffering; in other words, every one lost interest in the route, occupied as he was with affairs that needed more immediate attention. With the passing of this phase came a period of prosperity under the able administration of Sandys, and with prosperity the colonists could afford to look about them. Those keenly interested in geography, like the Reverend Samuel Purchas, seized upon all possible suggestions that would enable them to make up a case for the passage, and urged that efforts be made for its discovery. Yet officialdom was not stirred by the wishes of geographers and explorers, for the London Company was now interested primarily in the organisation of agricultural pursuits, chiefly tobacco growing, and placing the colony on a paying basis. Exploration must wait. There seems to have been little ambition to penetrate farther west than was necessary for the development of industry until the administration of Governor Berkeley; but before taking up the activities in the latter half of the seventeenth century we wish to mention an interesting voyage in 1634 to Delaware Bay, considered by some as the entrance to the passage.

Sir Tobias Matthew, who converted Cecil Calvert to the Catholic Faith, was interested in founding a Catholic colony in the New World, and also in finding a passage to the South Sea, which he believed could be discovered in Delaware Bay. For this purpose he, together with a few associates, obtained a commission from King Charles on September 23, 1633, for Captain Yong, who had been se-

lected as leader of an expedition to the bay. By this instrument Yong was empowered to explore all parts of America and, as a settlement was evidently contemplated, it provided for the government of the colony, the Crown reserving the usual bounty of one-fifth of all the gold and silver mined by the settlers.²⁴ There was some opposition to the scheme in influential circles, as is evident from the special arrangements made through Secretary Windebanke to prevent the expedition being stopped at the point of embarkation. Yong sailed on April 18, 1634, and crossed to Virginia where, after stopping to replenish his supplies, he sailed on the twentieth of July for "that great bay wherein," he says, "I purposed at my departure from England to make trial for the passage."²⁵ When he reached the bay he came to anchor and sent his lieutenant in a small boat to land and bring aboard some Indians from whom he could obtain information. The savages proved shy, so Yong was obliged to sail for two days up the bay, then seeing Indians on the western side he again sent out his boat, this time with more success. By means of his interpreter he was able to elicit from them the information that the Delaware River, near the mouth of which he was anchored, ran far up into the land, but how far the Indian he was questioning was unable to say. Yong remained about a month in the bay carrying on a friendly intercourse with the savages. Presently, at the invitation of one of the chiefs, he entered the Delaware River with the intention of ascending it until he should come to a line of rocks which he understood would prevent further navigation. Shallow water, however, impeded him before he came to the rocks, and he was obliged to send an officer to explore farther up. While awaiting reports, a Dutch vessel, sent by the authorities of New Amsterdam, who had learned of his arrival from the Indians, anchored

near him and sent a messenger to warn him that he was trespassing on Dutch territory; but Yong, showing the commander his commission, advised him not to interfere with the subjects of King Charles. The Dutchman took the hint and departed, closely followed by Yong's lieutenant, who had orders to see that the Dutch did nothing to stir up the Indians against them. Yong also took this occasion to order his subordinate to make an exploration northward along the Atlantic coast with the object of finding a clue to the passage. "I gave my lieutenant order," he says, "that after he had watched these Hollanders out of the Bay, he should go and discover all along the coast as far as Hudson's River and so on towards Cape Cod, to see if there were any probability of a passage through. He accordingly discovered along the coast as far as Hudson's River, where he was overtaken with foul weather and contrary winds, where he endured the storms till he was forced by the incommodiousness of his vessel and want of victuals to return."

Yong now turned his attention to the Delaware River again, but the officer whom he had sent ahead to explore the stream above the rocks reported that the barrier was impassable. Checked at this point, the captain sought to devise schemes for pushing his way up the river in small boats. In his letter to Sir Tobias Matthew he speaks thus of his intentions. "I passed up this great river [Delaware], which I mention to your Honor with purpose to have pursued the discovery thereof, till I had found the great lake, from which I am informed the great river issues, and from thence I have particular reason to believe there doth also issue some branches, one or more, by which I might have passed into that Mediterranean Sea, which the Indian relateth to be four days' journey beyond the mountains; but having passed near fifty leagues up the river, I was stopped from further

proceeding by a ledge of rocks . . . so that I determined against the next summer to build a vessel, which I will launch above the rocks, in which I purpose to go up to the lakes, from whence I hope to find a way that leadeth into that Mediterranean Sea and from the lake I judge that it cannot be less than 150 or 200 leagues to our north ocean, and from thence I purpose to discover the mouths thereof which discharge both into the North and South Seas. But if I shall fail of arriving to the lake which I am confident I shall not I will then take with me out of my vessel both workmen and provisions which shall be portable for the building of a small vessel which I will carry those four days' journey overland (whereof the Indian speaketh in the *Relation*) with a competent number of men and there I purpose to cut down wood and set up a small vessel upon the banks of that sea and from thence make my discovery." ²⁰

The information which the Indian in the *Relation* spoke of is this: Twenty-five days' journey above the rocks of the Delaware River, going in a northwesterly and west-northwesterly direction, the river issues from a great lake, and four days' journey beyond this over certain mountains one comes to a Mediterranean Sea. The Indian offered to go in person and guide Yong and his party to it. But Yong presently abandoned the scheme and returned home without accomplishing any of his objects.

Yong's voyage added little to the sum of geographical information regarding the Delaware River and the regions lying above it. He speaks of a lake in which the Delaware rises and a Mediterranean Sea four days' journey beyond it. The Delaware, as a matter of fact, does not have its source in a lake, but rises in the Catskill Mountains. The Susquehanna, however, issues from Otsego Lake in the heart of New York State, and it is quite possible that the Indian,

who did not himself see the source of the Delaware, may well have confused its upper reaches with those of the Susquehanna. If this were so the rest becomes clear, for it would be about four days' journey from Otsego Lake to Lake Ontario, a body of water which might well have been called a Mediterranean Sea. There are two Dutch maps dated 1614 and 1616 respectively which show a large lake, marked on one *Versch water*. These maps were drawn—at least the portion depicting this locality was drawn—from the explorations of one Klyenties, who ascended the Mohawk River and crossed to Otsego Lake where he descended the Susquehanna. The two maps offer some points of confusion as to the identity of the river coming from the *Versch water* lake, as on one it is clearly the Delaware, and on the other it may be the Susquehanna. Visscher's map, 1659, however, shows clearly that it is the latter. There is no indication on either of these two sketches of a great lake such as Ontario, for they do not extend far enough to the west, but the St. Lawrence River is plainly shown on them.

Such were the results of the efforts to find a route through Virginia during the early part of the seventeenth century. The actual work of exploration was restricted to the rivers flowing into the Atlantic from the Appalachian Mountains, and even these had not been traced to their sources. All theories about the proximity of the South Sea, or the routes to the North Sea, beyond this range of hills, were derived from the reports of Indians, and were interpreted according to prevalent ideas based on explorations in other parts of the continent. The English were sluggish in their movements westward, they lagged behind along the seacoast engrossed in agricultural pursuits and hemmed in by the mountain barrier of the Appalachians. It was not until after La Salle's voyage down the Mississippi, after the French had been for

years on the Great Lakes, that the English of Virginia reached the summit of the Blue Ridge Mountains. Hence before tracing their final attempt to find a river flowing westward from these hills to the South Sea we must retrace our steps to Canada and survey the work of French explorers begun by Samuel de Champlain.

CHAPTER V

THE FRENCH STRIKE ACROSS THE CONTINENT

Geography of North America at the beginning of the seventeenth century.

—Samuel de Champlain.—His voyages up the St. Lawrence and to Lake Huron.—The Jesuits enter upon the scene.—Nicolet's journey to Green Bay.—Jesuits gather clues regarding the Mississippi.—Father Lalemant's theory of the Western Sea.—Father Dablon's attempt to reach Hudson Bay.—Radisson and Groseilliers journey to the West.—Theory of the Mississippi River.—Jean Baptiste Talon.—His efforts to encourage exploration.—Dollier, Gallinée and La Salle.—Policy of Louis XIV.—Father Albanel dispatched to Hudson Bay.—Joliet and Marquette on the Mississippi.—La Salle starts on his memorable voyage.—Father Hennepin explores the upper Mississippi.—La Salle reaches the mouth of the Mississippi.

THE Edict of Nantes, promulgated in 1598, ended the long series of civil wars, known as the Wars of Religion, which for over thirty years had kept the French nation occupied with internal strife as well as with foreign complications. With the return of peace the country found itself under the masterful scepter of Henry IV, and was able to adjust its domestic affairs and settle down to a period of quiet and prosperity. At this opportune moment interest in the country across the seas, which Verrazano had reconnoitred and Cartier had explored, awoke from its long slumber and gave birth to a series of enterprises that led to the acquisition of the vast domain of New France. Yet during the period of inactivity the French had kept up their claims to New France by sending large numbers of vessels to the fishing grounds off Newfoundland, where they enjoyed a profitable trade in codfish. These enterprises were private affairs; they required no permission from the government as

there was no question of establishing colonies or taking possession of any new territory. And now that peace had come the officials were able to turn their attention to America. But before taking up the story of French exploration it is necessary to say a few words about the extent of the geographical knowledge of the St. Lawrence Basin at this time, in order that the reader may visualise the problems confronting Champlain and his contemporaries.

Jacques Cartier, it will be remembered, ascended the St. Lawrence to Montreal, where he stood at the junction of the Ottawa and Upper St. Lawrence and listened to the accounts which his Indian friends gave him of the inland seas beyond. The information thus obtained—and there was no other available until the days of Champlain—was used by geographers in their attempts to portray the contour, and determine the size, of the North American Continent. The presence of such a river as the St. Lawrence implied the existence of a great continent to supply the necessary drainage to feed it. Hence we find on many charts North America represented as a body of vast width, so vast that all possibility of access to the Pacific by the St. Lawrence appears to be out of the question. An excellent example of this is Ortelius's *Typus Orbis Terrarum*, published in 1570, and considered by Hakluyt as the greatest world map of the time, and incorporated by him in the first edition of his *Principal Navigations*, 1589. Passage to the Western Sea, according to this chart, could only be accomplished by sailing around the northern extremity of the continent and down through the Strait of Anian. Yet the map gives a suggestion, somewhat vague, it is true, of a possible connection with this northern passage by way of the St. Lawrence River. For running from the source of the Ottawa River to a bay in the Arctic Sea, which is probably the last phase of the Sea of Verrazano, the chart shows a dotted line indicating the possibility of an overland route.

Of a construction similar in their general outlines to the sketch of Ortelius are the maps of de Bry, 1596, Judaeis, 1593, and Quadus (the same as de Bry), 1600. These charts have a variation from the Ortelius map in that they show a lake, called *Lago de Conibas*, draining into the northern passage. It is located not far from the source of the Saguenay River. On the other hand Wright's map shows Conibas under the name of Lake Tadonac, and says its bounds are unknown. Like Conibas Wright's lake discharges into the northern passage, but it is also connected with the St. Lawrence River, implying thereby the existence of a through passage in this direction. Such was the extent of geographical knowledge in regard to the general contour of the North American Continent when the voyages of exploration and colonisation began under Henry IV.

The early voyages of Henry's reign were made primarily for purposes of colonisation. Champlain, it is true, does say that the object of these colonies was to establish stations on the route to the South Sea, but we can find in no other authority any statement that such was their purpose. Certainly the two abortive attempts made by French adventurers before the appearance of Champlain give no evidence of having been actuated by any interest in the Western Sea. The Marquis de La Roche, who was the first to bring over colonists, left his gang of convicts, for such was the personnel of his company, on Sable Island in the Gulf of St. Lawrence, where he had been driven by a storm; and these unfortunate men were obliged to remain there for several years until they were rescued, for the marquis on his return to France was thrown into prison, and was unable to bring them back. A second attempt at colonisation was made by two Frenchmen, Pontgravé and Chauvin, who established a settlement at the mouth of the Saguenay, but it produced no better results.¹

Samuel de Champlain, who now comes upon the scene, was born in 1567 in the seaport of Brouage. He served his apprenticeship in the royal navy, where he became imbued with a desire for adventure. When the war was over he seized, as a means of satisfying his restless spirit, the opportunity offered him of going to the West Indies for the purpose of bringing back to the King a report on the Spanish colonies. This venture occupied him for more than two years, and it was while thus travelling about the Spanish possessions that he visited the Isthmus of Panama where his interest in the South Sea was first roused. On the isthmus he saw the transportation of merchandise from a small river four leagues from Panama to the Pacific, and this led him to comment on the advantage that would accrue to commerce from a canal cut through the intervening land.² On his return to France he fell in with Aymar de Chastes, governor of Dieppe, who had just received from the King a patent granting him permission to make a settlement in Canada, and was looking for suitable men to assist him in the work of a preliminary exploration. Champlain's abilities at once led to his selection, and he was placed under Pontgravé who was to lead the expedition. Sailing in the year 1603 the party discovered nothing new but merely duplicated Cartier's feat of ascending the St. Lawrence to the site of Montreal. But on the way Champlain made a reconnaissance up the Saguenay for a distance of twelve or fifteen leagues, where he halted and learned from the savages of a lake (St. John's) situated above the rapids of the river. This lake, he was told, was a body of water of considerable size, as it took two days to cross it. Once on the other side it was possible, so the Indians said, by ascending any one of the three rivers which flowed into the lake, to reach the sources of the Saguenay after a three or four days' journey. The Montagnais Indians, who traded with the French, told Champlain of

other natives living along these three rivers who said that they dwelt within sight of a salt sea. "If this is the case," reasoned Champlain, "I think that it [the salt sea of the Indians] is a gulf of that sea which flows from the north into the interior, and in fact it cannot be otherwise."³ Hudson Bay had not yet been discovered, so Champlain was merely hazarding a guess, a very good one to be sure, at the possibilities of reaching the northern ocean by way of the Saguenay. On his map of 1613, drawn after Hudson had made his bay known to the world, we find this theory carried out, as the Saguenay is shown as rising not far from the bay where Hudson wintered.

Continuing up the St. Lawrence after this brief excursion the explorer came to the site of Montreal, where he found his further progress blocked by the Lachine Rapids, as had Cartier seventy years before him. Whatever may have been the object of his backers in financing the expedition Champlain, at least, was keenly interested in the question of a western sea. He had already learned something regarding a northern ocean by way of the Saguenay, so now he stopped to inquire the chances of reaching the western ocean by the upper St. Lawrence. The Indians, who answered his question, told him that in going westward up the river one passed the first (Lachine) rapids, then after a series of rapids came to a lake (St. Francis) some fifteen or sixteen leagues long, after which one again entered the St. Lawrence, passing through another lake, or rather a broader stretch of the river, and paddling through this presently came to "a lake some eighty leagues long with a great many islands; the water at its extremity being fresh and the winter mild." Obviously Lake Ontario is intended here, for during the seventeenth century this body of water was supposed to begin below the Thousand Islands, an archipelago situated in what is now considered the St. Lawrence River. Beyond this

lake was a fall which the Indians described as "somewhat high and with but little water flowing over"—a strange description for the mighty falls of Niagara. After making a carry around the falls the traveller came to Lake Erie, sixty leagues in length "containing very good water," a statement by which the savages presumably intended to convey the idea that the water of this lake was fresh, for Champlain in his efforts to learn of the Western Sea always described it as a body of salt water. At the end of this lake came a strait two leagues broad, "extending a considerable distance into the interior." This strait was the chain known as the Detroit River, Lake St. Clair and the St. Clair River. "They [the Indians] said," Champlain tells us, "they had never gone any farther, nor seen the end of a lake [Huron] some fifteen or sixteen leagues distant from where they had been, and that those relating this to them had not seen any one who had seen it; that since it was so large, they would not venture out upon it, for fear of being surprised by a tempest or gale. They said that in summer the sun sets north of this lake, and in winter about the middle; that the water there is very bad, like that of the sea."⁴ According to their account the water in this lake was salt like that of the sea.

In answer to Champlain's query as to whether the water in this lake descended in an unbroken stream to the St. Lawrence, the savages described the St. Lawrence as coming from the three lakes: St. Francis, the small lake in the upper St. Lawrence, and Lake Ontario, the supply from the upper lakes being cut off to a large extent by Niagara Falls. Hence they reasoned Lake Huron "might take its course by other rivers extending inland by either to the north or south." Evidently they underestimated the volume of water discharged through the Niagara River. Champlain did not concur with this view. He says: "What leads me to believe that there is no river through which this lake [Huron] flows, as

would be expected, in view of the large number of rivers that flow into it, is the fact that the savages have not seen any river taking its course into the interior, except at the place where they have been. This leads me to believe that it [Lake Huron] is the South Sea which is salt, as they say. But one is not to attach credit to this opinion without more complete evidence than the little adduced. This is all that I have actually seen respecting this matter, or heard from the savages in response to our interrogatories." Thus Champlain provisionally assumed Lake Huron to be the South Sea.

Returning down the St. Lawrence Champlain met on the Island of Orleans some Algonquins who were acquainted with the lakes, and he seized the opportunity to check up on the information he had obtained from the savages at the Lachine Rapids. The Algonquins described Lake Ontario in greater detail than had the other Indians, telling of two rivers, the Genesee and the Oswego, leading to the Iroquois country from the lake. At the end of Ontario, they said, was a falls, then came a great Lake (Niagara Falls and Lake Erie), and lastly, they said, was a sea, the bounds of which were unknown to them. They were unable to say, however, whether or not it was salt.

There still remained shrouded in mystery the region through which the Ottawa River led, but a few days later Champlain had the good fortune to make the acquaintance of an Algonquin who had travelled on Lake Huron, and who was able to give him an idea of what he would meet by ascending the Ottawa. Beyond the (Lachine) rapids, said the Indian, was a river (the Ottawa) broken by many rapids and falls by which one reached a lake some fifteen leagues in extent (Lake Nipissing), and whence by a stream (French River) a great body of water could be reached after a journey of from twenty to twenty-five leagues. This lake

(Lake Huron), the Algonquin estimated, was three hundred leagues in length. "Proceeding some hundred leagues in this lake," says Champlain in recounting the Indian's story, "they come to a very large island [Manitoulin], beyond which the water is good [i.e., fresh]; but that, upon going some hundred leagues farther, the water has become somewhat bad, and, upon reaching the end of the lake, it is perfectly salt. That there is a fall [Sault Ste. Marie] about a league wide, where a very large mass of water falls into said lake; that, when this fall is passed, one sees no more land on either side, but only a sea [Lake Superior] so large that they have never seen the end of it, nor heard that any one has."

Champlain, combining the two reports, namely the one of the route up the St. Lawrence and the other of the route up the Ottawa, concluded that the salt water lake, of which the Indians had spoken, was the South Sea. He assumed, rightly enough, the lakes mentioned in the two accounts to be one and the same. In summing up his conclusions he says: "That is all that I have been able to ascertain from all parties, their statements differing but little from each other, except that the second ones who were interrogated say that they had never drunk salt water; whence it appears that they had not proceeded so far in said lake as the others. They differ, also, but little in respect to the distance, some making it shorter and others longer; for that, according to their statement, the distance from the fall where we had been to the salt sea, which is possibly the South Sea, is some four hundred leagues. It is not to be doubted, then, according to their statement, that this is none other than the South Sea, the sun setting where they say." The salt water sea reported by the Indians was probably a story derived from the confusion of two different bodies of water. The savages had heard of a great sea or lake to the west, that is Lake Huron,

and they had also heard, indirectly of course, of Hudson Bay, a body of salt water. Having but vague ideas of geography, it was but natural for them to assume that the two were identical, and they therefore told Champlain of the great salt water sea to the west.

Champlain had by now acquired information concerning three different routes which might lead to the solution of his problem. One, by the Saguenay River, gave promise of access to a northern ocean, the existence of which was then only a matter of surmise; the other two, by paths up the St. Lawrence and up the Ottawa, led to a great body of water that might be a branch of the South Sea or the South Sea itself. This conception was not as curious then as it seems to us now, for Champlain considered the Great Lakes, or rather those he knew about, as extending in an east and west direction. Thus we see on his map of 1612 Lake Huron, the great lake three hundred leagues long, lying due west of Ontario; and on his map of 1632, drawn after he had personally visited these two bodies of water, the same error is repeated, while Lake Superior, here called *Grand Lac*, is placed due west of Huron. For some reason not easy to explain Lake Erie is curiously slighted on both charts; that of 1612 omits it altogether, while that of 1632 indicates it by a long river connecting Huron (here called *Mer Douce*) with Ontario. Champlain, on the latter map, is no longer under any delusion that even Superior is the South Sea, as he was inclined to believe from the Algonquin's account, for he shows it on this map as a lake, and calls it such; but from the direction in which it led he believed it would open a route to the South Sea. The continual references to salt water made by the natives led him on in his expectations; and yet the Indians with whom he conversed had never seen any salt water themselves, on the contrary the lakes they had visited were always fresh. And, be it noted, the salt water



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SAMUEL DE CHAMPLAIN. MAP IN HIS NARRATIVE: *Les Voyages de la Nouvelle France Occidentale*. 1632.

they reported was always farther away than they themselves had gone; it was known only on the say so of some one else. Champlain, in concluding his remarks on the possibilities of reaching this body of salt water, summarises the commercial advantages that would accrue to those who found the path to it in these words: "One would accomplish a great good by discovering, on the coast of Florida, some passage running near to the great lake before referred to, where the water is salt; not only on account of the navigation of vessels, which would not then be exposed to so great risks as in going by way of Canada, but also on account of the shortening of the distance by more than three hundred leagues. And it is certain that there are rivers on the coast of Florida, not yet discovered, extending into the interior, where the land is very good and fertile, and containing very good harbours." We can see by this the influence exerted by Champlain's discoveries upon the explorations of Captain Smith, and the reason for the strong belief among Englishmen in the possibility of finding rivers west of the Blue Ridge Mountains which would lead to the South Sea. Champlain's discovery of the Great Lakes acted as a spur to those who considered a passage or route through Virginia to be within the range of possibility; in fact, Champlain seems to have believed in it himself. The theory of a more southerly route to the Lakes was still popular years later in the time of Frontenac.

When he returned to the St. Lawrence in 1608 Champlain still felt drawn to the sea that washed the northern shores of New France; interest in the matter was a dominant motive with him and became the mainspring of his explorations. On this particular voyage he made no actual attempts at discovery in this direction but explored the Richelieu River and Lake Champlain instead. He did, however, pause at Tadoussac to make further inquiries regarding the

upper reaches of the Saguenay, and he received from his Indian friends substantially the same information he had obtained before, but with more detail and precision. Into St. John's Lake at the head of the river, so he was told, three rivers flow, one of which comes from the north very near the sea. This, of course, is an exaggeration, though these streams rise near Lake Mistassini, whence flows a river to James Bay. Then, continuing his discussion of northern geography, Champlain says, in speaking of the inhabitants of this region: "These people of the north report to our savages that they see the salt sea; and, if that is true, as I think it certainly is, it can be nothing but a gulf entering the interior on the north. The savages say that the distance from the north sea to the port of Tadoussac is perhaps forty-five or fifty days' journey, in consequence of the difficulties presented by the roads, rivers, and country, which is very mountainous, and where there is snow for the most part of the year. This is what I have definitely ascertained in regard to this river. I have often wished to explore it, but could not do so without the savages, who were unwilling that I or any of our party should accompany them. Nevertheless, they have promised that I shall do so. This exploration would be desirable, in order to remove the doubts of many persons in regard to the existence of this sea on the north, where it is maintained that the English have gone in these latter years to find a way to China."

Champlain, in his attempt to unravel the mystery, now had the benefit of Hudson's exploration—for the narrative quoted above was published in 1613—and knew for certain what before he had only surmised, namely, that a gulf extended southward from the northern ocean, which might place these waters within striking distance of the St. Lawrence. But the impracticability of establishing a permanent route across the intervening territory must have oc-

curred to him, for, as he himself admits, the length of time taken to make the journey to the northern gulf was nearly fifty days, as the trail lay over mountains and along tortuous streams through a country covered with a blanket of snow for the greater part of the year. Attempts to solve the problem of a route to the sea through this wilderness were, therefore, set aside in favour of what was regarded as the more favourable leads to the west. They were revived for a brief period in the latter half of the century, then abandoned again after Father Albnel had succeeded in making the overland journey to James Bay.

Meanwhile a show of interest in the passage was making its appearance in France. We have alluded to the negotiations between Henry Hudson and the Dutch East India Company which paved the way for Hudson's third voyage. Henry IV, through his minister, Jeannin, on this occasion made overtures to the merchant, Isaac Le Maire, who in turn was in communication with Hudson, for the purpose of inducing him to sail under the auspices of another company of which Henry was to be the patron. La Maire had fully discussed the scientific aspects of the undertaking with the geographer, Peter Plancius. The negotiations were carried on in secrecy, but in some manner or other the Dutch East India Company became suspicious and closed with Hudson before the King and Le Maire could act. The designs of Henry were evidently known to a certain extent, for a letter written to the Earl of Salisbury from a friend residing at Paris discloses some startling news. "The French," writes George Carew, the author of the letter, "are in hand with the discovery of a passage into the South Sea, by the northwest, and [I have been told] that one Poncet, a knight of Malta, has revealed that secret to the King, and is sworn not to tell it any further; that they purpose to build forts upon a strait through which that passage lieth, to make themselves masters

of it; and that this is one of the causes why the lieutenantcy of *Nova Francia* is taken from Mons. de Monts." ⁵

This letter, doubtless, retails current gossip fostered, perhaps, by the enthusiasm of Champlain, and based, as such rumours usually are, on a certain modicum of truth. Champlain, as we know, was very enthusiastic for the discovery of the South Sea, and at every opportunity he sounded the praises of the benefits to be derived from Eastern trade and the desirability of obtaining a share of it for France. He indulges in the opening chapter of his *Voyages*, published in 1613, in an argument favouring the development of Asiatic commerce. This business, he points out, has been the ambition of many princes and the ultimate object of the many enterprises launched for the discovery of the passage. These expeditions, fraught with great hardships, have so far resulted in failure, hence in late years the French have attempted to solve the problem by effecting permanent settlements on the coast of America, since voyages for the passage would start from there. Such posts could be used as points of departure on the long journey to Asia, or as stations where vessels could stop and replenish their supplies after the voyage across the Atlantic. "These considerations," says Champlain, "had induced the Marquis de la Roche, in 1598, to take a commission from the King for making a settlement in the above region [New France]. With this object he landed men and supplies on Sable Island. . . . A year after, Captain Chauvin accepted another commission to transport settlers to the same region; but, as this [commission] was shortly after revoked, he prosecuted the matter no farther." The Sieur de Monts then took up the work and founded a colony in Nova Scotia and attempted to finance it by profits derived from a monopoly of the fur trade, a monopoly which roused the jealousy of certain Basque and Breton merchants who caused its revocation. "But," Cham-

plain adds, "since a report had been made to the King on the fertility of the soil by him [de Monts], and by me on the feasibility of the passage to China, without the inconveniences of the ice of the north or the heats of the torrid zone, through which our sailors pass twice in going and twice in returning, with inconceivable hardships and risks, his Majesty directed *Sieur de Monts* to make a new outfit, and send men to continue what he had commenced."

The services rendered by Champlain in exploring the waterways of Canada were presently recognised by the government in the form of a commission granted him on October 15, 1612, which made him governing officer of Canada and empowered him, so runs the instrument, "to cause discoveries for this end [i.e., to get in touch with the natives] to be made in the said territories [New France], especially from the place known as Quebec as far as he is able to go beyond it in the lands and rivers that discharge into the said St. Lawrence River to try and find an easy route to China and the East Indies, or otherwise to go as far as he can along the shores of terra firma: to carefully search for all sorts of mines of gold, silver, copper and other metals and minerals."⁶ The principal object of this commission was to promote colonisation, and the returns which the government expected were chiefly in the nature of minerals and furs; but knowing Champlain's weakness it is safe to assume that the clause relating to discovery was inserted more to humour him than with any expectation of its bearing fruit.

Armed with this document Champlain embarked for Canada in the spring of 1613. During the previous winter he had met in Paris a man named Nicolas de Vigneau, who had told him of a voyage he had made to the North Sea by way of the Ottawa River, which river, he said, came from a lake that emptied into this sea. The distance from the Lachine Rapids or Falls of St. Louis at Montreal to this ocean was

not great, since it took but seventeen days to make the round trip. On the shores of this ocean Vigneau had seen the wreck of an English vessel. Champlain was elated; clearly this must be Hudson Bay. "Accordingly," he says, "I enjoined upon him to tell me the truth, in order that I might inform the King, and warned him that if he gave utterance to a lie he was putting the rope around his neck, assuring him on the other hand that, if his narrative were true, he could be certain of being well rewarded. He again assured me, with stronger oaths than ever; and in order to play his rôle better he gave me a description of the country, which he said he had made as well as he was able. Accordingly the confidence which I saw in him, his entire frankness as it seemed, the description which he had prepared, the wreck and debris of the ship, and the things above mentioned, had an appearance of probability, in connection with the voyage of the English to Labrador in 1612, where they found a strait, in which they sailed as far as the 63rd degree of latitude and the 290th⁷ of longitude, wintering at the 53rd degree and losing some vessels, as their report proves."

Champlain hurried to the French officials with this story and was urged by them to visit the place in person. He needed no second hint; and taking Vigneau along with him he sailed for Canada. To be able to go to the North Sea and return in seventeen days was an opportunity not to be missed, so he hurried by the Saguenay River, and continuing up the St. Lawrence was soon paddling his way through the waters of the Ottawa. On reaching Allumettes Island, halfway between Montreal and Lake Nipissing, he became suspicious. The replies he received to the questions he put the Indians did not seem to agree with the account given him by Vigneau; in fact, the savages denied all knowledge of the sea in question. And yet Champlain could not bring himself to doubt the veracity of his guide, for it seemed to him pre-

posterous that a man should fabricate a story which must eventually be proven false and bring condign punishment on the narrator. Moreover, Champlain according to his own calculations believed himself to be near the northern ocean. "If the report of the English be true," he says in his narrative, written after he was disillusioned, "the North Sea cannot be farther distant from this region than a hundred leagues in latitude, for I was in latitude 47° and in longitude 296° . But it may be that the difficulties attending the passage of the falls, the roughness of the mountains covered with snows, is the reason why this people have no knowledge of the sea in question; indeed they have always said that from the country of the Ochateguins⁸ it is a journey of thirty-five or forty days to the sea, which they see in three places, a thing which they have again assured me of this year. But no one has spoken to me of this sea on the north, except this liar [Vigneau], who had given me thereby great pleasure in view of the shortness of the journey." Champlain's pleasure was short-lived. The liar, unable to maintain his story in the face of the mass of contradictory evidence produced by the Indians, soon gave up and confessed. Champlain, be it said to his credit, forbore to mete out the capital punishment with which he had threatened Vigneau in France, much to the disgust of the Indian guides who were looking forward to the sport of a public execution. There being no reason for continuing up the river the explorer returned to Montreal and presently sailed for France somewhat crestfallen.

Though crestfallen Champlain did not abandon all hope. In the dedication of his *Voyages* to the Prince of Condé he tells of his abortive attempt to reach the northern ocean and the treacherous action of his guide, "but," he says, "although I regret having lost this year so far as the main object is concerned, yet my expectation, as in the first voyage,

of obtaining more definite information respecting the subject from the savages, has been fulfilled. They have told me about various lakes and rivers in the north, in view of which, aside from their assurance that they know of this sea, it seems to me easy to conclude from the maps that it cannot be far from the farthest discoveries I have hitherto made."

Two years after the fiasco at Allumettes Island Champlain again ascended the Ottawa. He made his way this time to Lake Nipissing, and descending the French River entered the broad expanse of Lake Huron. Whatever may have been his expectations of finding a short route to a northern ocean or western sea, they were greatly modified by the knowledge he now gained about the magnitude of the American Continent. He describes the region north of the St. Lawrence as mountainous and abounding in rocks with an exceedingly cold and disagreeable climate. It extends, he says, over six hundred leagues in breadth from east to west. "With regard to the regions further west," he says, "we cannot well determine their extent, since the people there have no knowledge of them except for two or three hundred leagues or more westerly, from whence comes the great river [St. Lawrence], which passes, among other places, through a lake having an extent of nearly thirty days' journey by canoe, namely that which we have called the *Mer Douce* [Huron]. This is of great extent, being nearly four hundred leagues long. Inasmuch as the savages, with whom we are on friendly terms, are at war with other nations on the west of this great lake, we cannot obtain a more complete knowledge of them, except as they have told us several times that some prisoners from the distance of a hundred leagues had reported that there were tribes there like ourselves in colour and in other respects." The great length of four hundred leagues assigned by the Indians to Lake Huron—and this length was believed to ex-

tend from east to west—may be due to a misconception caused by regarding Huron and Michigan as one body of water, for the Indians in paddling from the southern end of the first around the peninsula of Michigan to the southern end of the latter, would cover a great distance, and this they described as the length of the lake.

Champlain was the first explorer to learn from the lips of natives the vast width of the continent before him. Geographers had, it is true, shown this on their maps, but there was always the possibility in the minds of some travelers of the existence of a branch of a western sea, thrusting itself within striking distance of the Atlantic seaboard. By the discoveries of Champlain much was made clear. Great bodies of water, which presented themselves to the imagination as branches of the South Sea, were now found to be fresh water lakes of a magnitude hitherto unknown. In turning to Champlain's map of 1632 we see this reproduced graphically. The chain of the Great Lakes is represented, very inaccurately to be sure, but the illusion that they might be connected with a western ocean is banished once for all. There is also one other point to which attention should be called: a northern sea, distinct and separate from Hudson Bay, is shown on the chart. It will be seen, as the story progresses, that the French in their search for geographical information heard from their Indian allies, as did Champlain, frequent mention of a sea to the north. This sea they did not always identify with Hudson Bay. They had heard of the bay from British sources, but whether the savages referred to this bay or to a northern ocean hitherto unknown was a question which could not be solved save by actual exploration. We shall see this question recurring from time to time especially in the narratives of the Jesuit Fathers. From now on, however, the discoveries of the French enter upon a

new phase. The explorers no longer look for the South Sea itself, but for a river leading to it.

During the period between Champlain's governorship of Canada and the coming of Jean Baptiste Talon as intendant of New France in 1665, officialdom paid little attention to passages or routes to a western sea, or, indeed, to any form of exploration. The colony during this time was in the hands of an organisation, known as the Hundred Associates, a company interested in developing the economic resources of Canada, especially the fur trade. Louis XIII in the charter he granted the company in 1627 makes no mention of discovery, nor do we find any allusions to this subject in other documents bearing on the incorporation of the Associates. The charter concerns itself only with the business and administrative ends of the enterprise. Under this company's administration considerable interest was manifested in the possibilities of a route to the Pacific, but it was confined to private individuals, chief among whom were the members of the Society of Jesus.

After the retrocession of Canada to France by the treaty of St. Germain in 1632, the Jesuit Fathers returned to Canada and began their work in earnest. Unlike the Puritan missionaries, who clung to the settlements along the seacoast, the Jesuits struck out boldly westward and established their principal post in Huronia on the southern shore of Georgian Bay. Here they busied themselves with the work of converting the natives, a work that frequently took them on expeditions to the surrounding countries, and this enabled them to gather a considerable amount of geographical information. As their knowledge increased, they began to take an interest in the possibilities of finding a route to the Western Sea by the great waterway that lay at their feet. The Jesuits had always been keenly interested in scientific knowledge;

as educated men they were well equipped to observe the country about them in an intelligent manner and to evaluate the rumours they heard from the Indians regarding a sea or great bay of water to the west. The mission station in Huronia therefore became a sort of headquarters whence numerous expeditions were sent out to survey the neighbouring countries and report on geographical as well as other conditions found there. Not that these expeditions were primarily for material purposes; far from it, the object was almost invariably the conversion of the Indians, but as some of these tribes lived at a considerable distance from Huronia, the voyages undertaken often led the travellers to remote parts, where they found much to excite their interest besides the spiritual work at hand. This, the first phase of Jesuit exploration, lasted until Huronia was destroyed by the Iroquois in 1649. The knowledge gathered on these undertakings led to a far more accurate conception of the Great Lakes, as may be seen on Nicolas Sanson's map, *Amerique Septentrionale*, 1650, and enabled geographers to correct the somewhat vague and hazy ideas of Champlain. Sanson's outline of the Great Lakes is remarkably accurate considering the extent of knowledge at the time when it was drawn, and it was used as a standard for many years. The second phase of Jesuit activity may be reckoned from the destruction of Huronia for after this event the Fathers spread themselves over a wider territory, and thus came in contact with tribes living farther to the west, from whom they picked up hints of a great water lying towards the sunset. The principal western mission for this period was the station at Michilimackinac near the junction of Lakes Huron and Michigan.

During the residence of the Jesuits in Huronia an expedition was made to a point near the Mississippi that seems to have caused but little interest at the time, but had considerable subsequent bearing on the route to the South Sea. Jean

Nicolet was delegated by Champlain in the year 1634 to make a journey to the Winnebagoes, known as the People of the Sea, who were distant about three hundred leagues west of Huronia and resided at the head of Green Bay. The purpose of this undertaking was to make peace between them and the Hurons and to find a route to China. In anticipation of meeting the Chinese Nicolet wore a robe of China damask "all strewn with flowers and birds of many colors." Nicolet made his way up Lake Huron, through the Strait of Mackinac, and, coasting along the northern shore of Lake Michigan, entered Green Bay, which he ascended to its head. Here he met the Winnebagoes. These Indians were called Ouinipeg in the Algonquin tongue, a word which signifies bad smelling water, a name applied to the salt water of the sea, and so the French, translating the name literally, called them the *Nation des Puans* or Nation of Stinkards. They came, it was believed, from the shores of a sea about which the French had no knowledge.⁹ The correct derivation of the name was not learned until Father Marquette explored Green Bay and found that the words "bad smelling" came from the stench arising from the mire and mud in the vicinity of the Winnebago settlements and not from any proximity to salt water. Be this as it may, the French before Marquette's visit to Green Bay were misled by the name, Ouinipeg, and by the report Nicolet gave of his journey, into a belief that the sea was not far distant from this tribe.

The details of Nicolet's voyage are very meagre indeed, and give us but little clue to the distance he penetrated inland from the bay. He told Father Vimont that "if he had sailed three days' journey farther upon a great river which issues from the lake [Green Bay], he would have found the sea."¹⁰ Here again we find the confusion which the word "sea" or "great water" occasioned in the mind of an Indian, and in western Canada the mistake was more excusable than it was in

Virginia, for the Indians of Wisconsin had a much vaguer notion of a salt water ocean than those dwelling about Chesapeake Bay. Nicolet, according to the authority of one who has made a careful study of his itinerary, penetrated some distance up the Fox River, a stream flowing into the head of Green Bay. The sea which he referred to as being at a distance of three days' journey from his farthest west was, therefore, the Wisconsin River, a branch of the Mississippi or great water, which passes very near the Fox on its way to the parent stream.¹¹ Whatever Nicolet may have found on his voyage he at least demonstrated that the South Sea was beyond the point to which he had penetrated, that is, having gone farther west than any one had up to his time he had failed to find it but had brought back a report of the savages to the effect that it lay still farther to the west; and with this information the French were obliged to remain content for many years to come. Nevertheless, the discovery of the People of the Sea gave great expectations of further discovery and of the possibility of finding a route to China.

During the period preceding the arrival of the intendant, Talon, a man who greatly stimulated exploration, we find frequent references to proposed expeditions to a western sea, which disclose a desire on the part of private individuals to open a route to the Far East. Fathers Jogues and Raymbault penetrated in 1641 to the Sault Ste. Marie, following for a short distance in the footsteps of Nicolet. Their object was to visit the tribes in this region with a view to making converts, but while among them they made inquiries as to what lay farther to the west. The journey evidently whetted the ambition of Raymbault for we find a notice in Vimont's *Relation* of 1642-3 that at the time of his death he was considering a way to China through the region about the Sault. As another instance of the same interest we may mention the fragmentary portion of a commission granted to the

Count de Brion, which has been preserved, showing his wish to find a path to China and the land of the Incas.¹²

Though little was done at this time in the way of actual exploration, much was accomplished in accumulating a knowledge of American geography, as well as in gathering information from the Indians of the location of a western sea and the way to it. At first the great water which the Indians told about appeared hazy and uncertain, but now it began to crystallise into a mighty river flowing either west or south into the South Sea. As the Canadians commenced to grasp the vast extent of the French colonial empire, the South Sea gradually receded until they at last realised the impossibility of reaching it save by a westward flowing river. They saw that the chain of lakes in the midst of their territory was not connected with any body of salt water, either to the north or to the west, and that it would be necessary to cross a watershed separating these lakes from a stream leading to the Western Sea. It was to the task of finding such a river that their efforts were now directed; and in collating and analysing the reports brought by the Indians to the French the Jesuits took the lead.

When the Jesuits first entered the Iroquois country in western New York State, they learned of a great stream which flowed into a sea, believed by them to be that of China. This report referred to the Allegheny River which, by its junction with the Monongahela, forms the Ohio, thus giving access to the sea by a continuous stream from the western part of New York State. Later, a Jesuit missionary working among the Iroquois heard of an expedition these Indians were planning against a tribe far to the west, and inquiring its location learned of the great river. "Their villages," he says, speaking of the hostile nations, "are situated along a beautiful river which serves to carry the people down to the great lake (for so they call the sea), where

they trade with Europeans who pray as we do, and use rosaries as well as bells for calling to prayers. According to the description given us, we judge them to be Spaniards. That sea is doubtless either the Bay of St. Esprit [Mobile Bay] in the Gulf of Mexico, on the coast of Florida; or else the Vermilion Sea [Gulf of California], on the coast of New Grenada, in the great South Sea.”¹³ As the “beautiful river” was a popular name for the Ohio, the river described by the savages can be no other than the Ohio and lower Mississippi, which form a waterway to the Gulf of Mexico.

The Mississippi, though known to the Canadians in a general way from Indian reports, was not mentioned by name until 1667, when Father Allouez speaks of the Nadouesiouek or Sioux in writing from his mission of St. Esprit at La Pointe on Lake Superior. He says: “These are the people dwelling to the west of this place toward the great river Messipi. They are forty or fifty leagues from this place, in a country of prairies, rich in all kinds of game.” Three years later Father Marquette, who was beginning to gather information concerning the mighty stream, whose exploration was to immortalise his name, wrote to his superior a letter throwing further light on the subject. “When the Illinois come to La Pointe,” he says, “they cross a great river which is nearly a league in width, flows from north to south, and to such a distance that the Illinois, who do not know what a canoe is, have not yet heard mention of its mouth. . . . It is hard to believe that that great river discharges its waters in Virginia, and we think rather that it has its mouth in California. If the savages who promise to make me a canoe do not break their word to me, we shall explore this river as far as we can, with a Frenchman [Joliet] and a young man who was given me, who knows some of those languages and has a facility for learning the others.

. . . This discovery will give us full knowledge of the South Sea or of the Western Sea.”¹⁴ Marquette refers here to the Mississippi. A few paragraphs further on in his letter he mentions a river leading to the Western Sea from the territory of a tribe situated fifteen or twenty days’ journey west of St. Esprit, and tells us that the savage who told him about it said he had been at its mouth, where he had seen Frenchmen and four large canoes with sails. Obviously this river is also the Mississippi, though Marquette fails to identify it with the one reported by the Illinois. From the narrative of Father Allouez we learn of the exact approach to the Mississippi, discovered by him on his exploration of the Fox River. The Fox, he says, “leads by a six days’ voyage to the great river named Messi-Sipi.” By the Messi-Sipi Allouez means the Wisconsin, a branch of the Mississippi, which in its course to the parent stream comes within a short distance of the Fox. This route, the Fox-Wisconsin portage, was for years one of the principal means of access from the Great Lakes to the Mississippi Basin.

Father Dablon, sometime head of the Jesuit missions in Canada, and a man whose knowledge of Canadian geography was greater than that of any of his contemporaries, for he made a special study of the subject, describes the Mississippi as a stream rising in the north and flowing south into either the Vermilion Sea or the Florida Sea (Gulf of Mexico), an assumption based upon the belief that “there is no knowledge of any rivers in that direction except those which empty into these two seas.” This river, he learned from the savages, was so great that at more than three hundred leagues from its mouth it is larger than the St. Lawrence at Quebec; in fact, more than a league wide. Some warriors had made their way to the sea by this stream and reported the presence there of men resembling the French “who were splitting trees with long knives; and that some of them had their

houses on the water,—for thus they expressed themselves in speaking of sawed boards and of ships.”¹⁵ The certainty of a route to the South Sea by river was by these reports well established, and it remained only to ascertain the nature of the northern sea, rumours of which were constantly reaching the ears of the Canadians.

Champlain, it will be remembered, had heard of a vast sea located some fifty days' journey up the Saguenay. This ocean he had surmised accurately enough to be the bay discovered by Hudson. But as the Jesuits pushed farther west they also heard of a northern sea, and there naturally arose in their minds the question whether this ocean was the same as Hudson Bay. The discoveries of Sir Thomas Button had brought to light on the western shore of Hudson Bay a recess known to-day as Port Nelson at the mouth of the Nelson River, but which was called Button's Bay on seventeenth century charts. Owing to the peculiar tidal currents observed by Button at this spot many believed in the probability of a further passage through this gulf. A glance at Sanson's *Amerique Septentrionale*, 1650, shows us the prevailing conception of the line of communication between Hudson Bay and the sea to the west. Northwest of Lake Superior, and not far distant from it, there is shown on this map, in a somewhat indefinite manner, it is true, an outline of a *Mer Glaciale* quite distinct from Hudson Bay, with Button's Bay forming the connecting link between the two. In summing up current knowledge of this northern ocean and the South Sea, as well as of a western sea of which accounts were rife among the Indians, Father Lalemant developed the theory that the three oceans were intercommunicating, and he also adopted the belief that the northern sea was connected by a free passage with Hudson Bay. "The savages dwelling about that [western] end of the lake [Superior] which is farthest from us," he writes in the *Relation* of

1659-60, "have given us entirely new light, which will not be displeasing to the curious, touching the route to Japan and China, for which so much search has been made. For we learned from these peoples that they find the sea on three sides, toward the south, toward the west, and toward the north; so that, if this is so, it is a strong argument and a very certain indication that these three seas, being thus contiguous, form in reality but one sea, which is that of China. For,—that of the south which is the Pacific Sea and is well enough known, being connected with the North Sea, which is equally well known, by a third sea, the one about which we are in doubt,—there remains nothing more to be desired than the passage into this great sea, at once a western and an eastern sea. Now we know that, proceeding southward for about three hundred leagues from the [western] end of Lake Superior, of which I have just spoken, we come to the Bay of St. Esprit [Mobile Bay], which lies on the thirtieth degree of latitude and the two hundred and eightieth of longitude, in the Gulf of Mexico, on the coast of Florida; and in a southwesterly direction from the same extremity of Lake Superior, it is about two hundred leagues to another lake, which empties into the Vermilion Sea on the coast of New Grenada, in the great South Sea. It is from one of these two coasts that the savages who live some sixty leagues to the west of our Lake Superior obtain European goods, and they even say that they have seen some Europeans there. Moreover, from this same Lake Superior, following a river toward the north, we arrive, after eight or ten days' journey, at Hudson Bay, in fifty-five degrees of latitude. From this place, in a northwesterly direction, it is about forty leagues by land to Button Bay, where lies port Nelson, on the fifty-seventh degree of latitude and the two hundred and seventieth of longitude: the distance thence to Japan is to be reckoned at only one thousand four hundred and twenty

leagues, there being only seventy-one degrees of a great circle intervening. These two seas, then, of the south and of the north, being known, there remains only that of the west, which joins them, to make only one from the three; and it is the fresh knowledge that we have gained from a nation which, being situated at about the forty-seventh degree of latitude and the two hundred and seventy-third of longitude, assures us that ten days' journey westward lies the sea, which can be no other than the one we are looking for,—it is this knowledge that makes us believe that the whole of North America, being thus surrounded by the sea on the east, south, west, and north, must be separated from Greenland by some strait, of which a good part has already been discovered; and that it only remains now to push on some degrees farther, to enter nothing less than the Japan Sea.”¹⁶

Father Lalemant thus looked out on the North American Continent as he stood in fancy at the western extremity of Lake Superior facing the setting sun. To the south lay the Gulf of Mexico, distant but three hundred leagues; to the southwest at a distance of two hundred leagues was another lake¹⁷ draining into the Vermilion Sea, and indirectly into the South Sea; to the north was Hudson Bay, already known and well explored, with Button's Bay adjacent to it, and distant but fourteen hundred and twenty leagues from Japan; while to the west, ten days' journey from Lake Superior, lay the Western Sea. We have here the first hint of a geographical conception which was destined to play an important part in the story of western exploration during the eighteenth century, namely, that there was a western ocean separate and distinct from the South Sea. Hitherto the two terms South and Western appear to denote the Pacific Ocean along the western shore of North America—in fact we have used them in this manner frequently—but now there sprang up a new idea, based on Indian reports, of a sea separate from the

Pacific and situated somewhere in the west, north of the forty-fourth parallel, which point marked the farthest north claimed by the Spaniards.

Lalemant's views of the northern ocean as a means of communication with the Pacific were shared by others. Father Dablon was keenly interested in gaining access to this sea and testing the truth of Lalemant's theory. At this time reports had been received by the Canadian officials of the intention of the Indians to hold a fair at some place in the northern region, to which the savages of Quebec and Tadousac were going. Here was an opportunity to make the acquaintance of natives who could tell at first hand of the countries about Hudson Bay which had hitherto only been known by reports relayed from tribe to tribe. "Such information, moreover," says Father Le Jeune, "is both important and curious, as well for an exact knowledge of the longitudes and latitudes of that new country—data on which is based in part the assumption that a passage to the sea of Japan is to be found there—as also for seeing on the spot what means there are for labouring effectively for the conversion of those people."¹⁸ Accordingly, Father Dablon determined to make an expedition in person to the northern ocean; and taking with him as companion, Father Druillettes, a priest who had already travelled over a considerable extent of territory, and had compiled a careful study of Indian trails leading to Hudson Bay, he started up the Saguenay River to Lake St. John. His route, after leaving the lake, lay along a course never before traversed by a white man. He ascended the Chamouchouan River and attempted to reach Lake Mistassini by the chain of lakes at the head of the river, but on arriving at a point half way between the St. Lawrence and James Bay he was forced to return because of the Iroquois hostilities which threatened disaster to the expedition.

Despite this failure Dablon, who appears to have had some doubts as to Lalemant's reasons for identifying Hudson Bay and Button's Bay with the northern ocean reported by the Indians, continued his interest in the problem, and laboured for its solution. Several years later he wrote a word of encouragement for the discovery of the North Sea and pointed out its advantages. It would enable one, he said, "first, to find out, by a comparison of the latitude and longitude of this place [Quebec] with that of the [northern] sea, whether that sea is the bay to which Hudson penetrated in the year 1612 (*sic*), or some other; and then to ascertain what part of the North Sea is nearest to us. Secondly, to learn whether communication can be had from Quebec all the way to this sea by following all the northern shores, just as was attempted some years ago."¹⁹ The possibility of communication, Dablon goes on to say, would depend on the situation of the bay to the north, for if it is Hudson Bay, or one farther west, access to it would be difficult, since it would involve sailing around a promontory as far north as 63°. A voyage of discovery in this direction would also give opportunity for verifying the conjecture of a passage by these waters to the Japan Sea. Dablon, to reinforce his theory of a western ocean, quotes Indians who tell of such a sea, reached by a great river, where sailing vessels have been seen. He concurs in the belief that all the three seas are contiguous, and he urges the discovery of the northern ocean on the ground that it would be possible to pass from it to the Japan Sea.

The routes from the mission of St. Esprit at the western extremity of Lake Superior to the tribes which some day, it was hoped, would lead explorers to the three seas are carefully shown on a map of Lake Superior accompanying Dablon's *Relation* of 1670-1. From St. Esprit a dotted line runs south. On it we find an inscription stating that the trail leads to the Illinois Indians one hundred and fifty leagues in that

direction. At the mouth of the St. Louis River, near modern Duluth, we find a legend telling us that this stream takes one to the Nadouessi or Sioux, sixty leagues westward. On the northern shore of Superior we find a stream, known to-day as the Pigeon, labelled the "river by which one goes to the Assinipoualac (Assiniboinés) situated one hundred and twenty leagues towards the northwest." These three tribes, then, the Illinois, Sioux and Assiniboinés, were the ones on whom Dablon relied for assistance in reaching the three oceans, since they were the nations among whom originated the stories of the salt water seas beyond them.

During this period, that is before the voyage of Father Marquette down the Mississippi in 1673, the Mississippi was actually visited and explored for a short distance by two French *voyageurs* named Pierre Radisson and the Sieur des Groseilliers. These two men ascended the Ottawa River in 1654 and made their way along the northern shore of Lake Huron to the Strait of Mackinac, then to Green Bay, where they entered the Fox River. Going up this river they reached the Mississippi in the southeast corner of Minnesota. Here they ascended the stream to Prairie Island. Groseilliers encamped on the island for the summer, while Radisson, accompanied by a party of Indians, went on a four months' hunting expedition that took him down the Mississippi and led him to the Illinois River. This discovery of the Mississippi did not at the time receive the attention it deserved, for Radisson and Groseilliers were reluctant to disclose the extent of their wanderings until they had penetrated to the north as far as Hudson Bay, for then they could report a complete survey. "My brother [Groseilliers] and I," says Radisson in his narrative, "considered whether we should discover what we have seen or no; and because we had not [made] a full and whole discovery, which was that we have not been in the bay of the north, not knowing any-

thing [of it] but by report of the wild Christinos, we [decided we] would make no mention of it for fear that those wild men should tell us a fib. We would have made a discovery of it ourselves and have assurance, before we should discover anything of it.”²⁰

On a later journey to the west the two explorers visited the northern shore of Lake Superior. The record of their wanderings, as told in Radisson's narrative, is so vague and confused in certain parts that one cannot say whether or not they reached Hudson Bay. One passage suggests such a feat, but a careful analysis of the context, together with a due allowance for the time it would take to accomplish such a journey, and the difficulties the travellers were bound to encounter, of which no mention is made, compels us to reject the idea of a northern journey. The travels of Radisson and Groseilliers made, as we have said, but little impression on their contemporaries, due to the silence the explorers had agreed to maintain. The two adventurers presently entered the service of King Charles II, after a disagreement with the Canadian officials over a question of fur trading, and Radisson compiled the only record of their wanderings for the benefit of the English King. The narrative is written in such atrocious English that it is doubtful if Charles could understand it.

The compilation of the foregoing geographical knowledge had been a matter of many years. The work had been painfully slow, and as most of the information was obtained from Indians who, in turn, learned it from other tribes situated farther off, it was by no means accurate. Only by the most careful sifting of facts and weighing of evidence, an accomplishment of which Father Dablon seems to have been a master, could one obtain a reasonably correct knowledge of the country situated beyond the range of actual exploration. To the west lay the mysterious Western Sea, the existence of

which was vouched for by tribes living beyond the Sioux. To the north, according to the northern savages, was another ocean; and English explorers by the discovery of Hudson Bay had verified this rumour. To the south was the Gulf of Mexico, and to the southwest the Vermilion Sea. To solve the mystery of the oceans which washed the farther sides of the American Continent the French had at their disposal a sum of knowledge that resolved itself into the following facts: A river, the Mississippi, lay a short distance from Green Bay. It was a mighty stream of several hundred leagues in length and flowed in a southerly direction. Did it debouch into the Vermilion Sea or into the Gulf of Mexico? A second river, the Ohio, called by some Indians the Mississippi, was known to flow in a westerly direction, and the same question arose as to the waters into which it emptied. Thus there were two avenues leading probably to the South Sea, and these could be reached from Lake Michigan and from Lake Ontario respectively. To the northern sea there were also two routes: the Saguenay leading to Hudson Bay, and the Pigeon River of Lake Superior leading either to Button's Bay or to that of Hudson. Between these two units of routes (i.e., those to the south and those to the north) there was yet a third route: the mysterious trail to the Western Sea which sea Father Lalemant describes as a ten days' journey west of a nation in the vicinity of Lake Superior. It was to be reached, according to Lalemant, by a river. The account of this last route being false its details were consequently vague, but fortunately the possibilities it presented did not turn explorers from the southern route about which they had more definite knowledge. Such were the data accumulated and such were the speculations on foot when Talon appeared on the scene.

Among the French Canadians who fostered the work of exploration during the seventeenth century none deserves

more credit than Jean Baptiste Talon. Sent from France by Louis XIV's minister, Colbert, as intendant of Canada in 1665, his position did not permit him to show his zeal for exploration by leading expeditions in person. He was obliged to content himself with remaining in Quebec and directing the work from a distance; therefore, his name does not shine so brightly in the annals of the Canadian forest as do those of Champlain, Marquette and La Salle. Yet the intendant was a man of great energy and imagination. He displayed a keen grasp of the opportunity which lay before France of establishing a vast colonial empire and bringing a mighty continent under her sway. Moreover the time for this work was propitious as the affairs of Canada had undergone an overhauling. The management of the colony by the Hundred Associates had not been successful, and an appeal to the King had led to a revocation of their charter. As a result Louis began to assume a more paternal attitude towards his subjects beyond the seas. The Sieur de Courcelles was sent to replace Mesy as governor of Canada, Talon was appointed intendant, a regiment of soldiers was dispatched to protect the colonists against the Iroquois, and some four or five hundred settlers were transported to reinforce those already there. All this took place in 1665. The following year saw the Iroquois crushed, and thus, the most pressing danger being removed, Talon was able to turn his attention to his schemes for increasing the population of New France and establishing commerce on a sound basis. These activities occupied his entire time during the first period of his administration which lasted till the year 1668, when he returned to France for a short vacation. During his first term of office he paid comparatively little attention to exploration; his commission gave him no instructions on the subject, and like a wise man he busied himself with working for the prosperity of the colonists about Quebec

before striking out into the interior. His instructions for the administration of his duties point to the evils of allowing colonists to settle on large tracts situated far apart from one another, as this would prevent them from concentrating for defence against the Iroquois; and the intendant was ordered to discourage this process of expansion as much as possible.²¹ Such a policy, of course, tended to discourage exploration. Yet Talon was restive under anything that clouded his great vision, and he took the first opportunity to imbue the home government with a portion of his own spirit. "I have the honour to tell you," he says in one of his earliest letters to Colbert, "that Canada stretches forth a great distance, that towards the north I do not know its limits so far distant are they from us, and that towards the south nothing hinders us from carrying the arms of his majesty as far as Florida, New Sweden, Holland and England, and that by the first part of these countries one goes as far as Mexico."²² Colbert for his part was not averse to the extension of French dominion if the same could be restricted within reasonable bounds. He informed Talon of the King's approval of his project and instructed him to take possession of new territories by setting up the royal arms and recording the act by a suitable document pre-empting title to the country claimed; but he warns the intendant to restrain his activities to territories which the colony could easily handle, else he might reach out for land that must some day be abandoned, to the detriment of his majesty's reputation.

After a stay of three years Talon returned to France. Before leaving Canada, however, he made arrangements for sending out two expeditions to the west. Louis Joliet, who was afterwards to acquire fame on the Mississippi River, was to go in company with one Péré (Perray), described as a half-savage Canadian, to locate a copper mine which he claimed to have seen in the vicinity of Lake Huron. The

other expedition was organised by the Seminary priests of Montreal who for a few years had maintained a mission at Quinté on the northern shore of Lake Ontario. They selected for the work two members of the Sulpitian order, Dollier de Casson and Father Gallinée, men of courage and ability, well fitted for the business entrusted to them. At the request of Courcelles the Sulpitians joined forces with a man destined to become one of the greatest Canadian explorers, Robert Cavelier de La Salle.

La Salle came to Canada in 1666. A man of indomitable courage, and endowed with a vivid imagination coupled to a stubbornness that enabled him to overcome almost insurmountable obstacles in the realisation of his ambition, he manifested a desire to discover a route to the South Sea that amounted almost to an obsession. With this object in view he purchased a place on the island of Montreal which the Canadians, in a spirit of derision for the owner's eccentric project, called *La Chine*, in reference to the supposed route which he expected to find to China. La Salle at once communicated his intentions to Governor Courcelles. Fortunately for his restless spirit he was not obliged to wait long for an opportunity, for Fathers Dollier and Gallinée were about to start on their voyage. During his short stay in Canada La Salle had formed some fairly definite notions of the route to the South Sea from the description of the Ohio given him by some friendly Senecas, and, as the path to this river lay in the same general direction as the Fathers were about to take, he was glad to seize this occasion to join them. The Abbé Gallinée says, in speaking of the proposed enterprise: "It was there [at Quebec] that M. de Courcelles begged him [Dollier] to join forces with M. de La Salle, brother of M. Cavelier, to undertake the voyage that M. de La Salle had planned for some time to a great river which he believed (according to what he thought he

had learned from the savages) flowed towards the west, at the end of which after seven or eight months of travel, the said savages said that the land ends, that is to say according to their way of expressing themselves, this river falls into the sea, this river is called in the Iroquois tongue, the Ohio. It is on this river that there are many nations that no one here has yet seen, but so numerous that according to the savages a certain nation will have fifteen or twenty villages. The hope of getting beaver, but especially that of finding by this route a passage to the Vermilion Sea, into which M. de La Salle believes the Ohio River falls, caused him to undertake this voyage so as not to allow another to have the honour of finding the route to the South Sea and by it the route to China.”²³

In the month of July, 1669, the adventurers began their ascent of the St. Lawrence, and after reaching Lake Ontario coasted along its southern shore. Arriving at the western end of the lake La Salle refused to continue any farther because of illness, and so the explorers separated. But the Sulpitians before resuming their journey were met by Joliet and Péré who were returning from their unsuccessful search for the copper mine. Joliet gave the Fathers a sketch of the route he had taken together with instructions for continuing their voyage to Lake Huron. Dollier and Gallinée then proceeded along the shore of Lake Erie and reached Lake Huron by way of the Detroit River after taking formal possession of the country.

Meanwhile, La Salle with some Indian companions had started on his search for the sea. Presumably he ascended the Genesee River in western New York State to the headwaters of the Allegheny, for on the map of Father Raffeix a dotted line is drawn from the village of the Senecas, along a stream flowing into Lake Ontario, to a branch of the Ohio, and a note on the map suggests this as a short route

to the Mississippi. Launching his canoe on the Allegheny La Salle soon reached its junction with the Monongahela and glided into the broad waters of the Ohio. This he followed "to a place where it falls from a great height into vast swamps, at 37° north latitude, after having been swollen by another large river that comes from the north; and all these waters discharge themselves by all appearances into the Gulf of Mexico, and make him hope to find a new communication with the sea, from which New France can some day get very great advantages, as well as from the great lakes that take up a part of North America."²⁴ The information regarding the journey on the Ohio is not sufficient to permit definite conclusions about the distance La Salle travelled down the river. Joliet's two maps,²⁵ known as the larger and the smaller (1674) show the Ohio River running very near Lake Erie with a dotted line connecting the river with a stream flowing into the western end of the lake. An inscription on these maps indicates that La Salle descended the Ohio on his way to Mexico from the mouth of Lake Erie. On neither of these charts, however, do we find any suggestion of the spot where La Salle turned back; but from the text of the narrative just quoted one is inclined to consider the falls at Louisville as the point where the expedition was abandoned. The data showing La Salle's wanderings during this and the following year are slender, and it is impossible to learn the exact truth about them. He is said to have visited Lake Michigan and the Illinois River in 1671, and even the Mississippi, but this last claim, at any rate, has been discredited.²⁶

Returning to Talon we find that after a short stay in France he came back to Canada in 1670. His program now was one of expansion and the bringing of distant lands within the French sphere of influence. Shortly after his arrival at Quebec he dispatched resolute men to penetrate to the

north and northwest, with instructions to keep accurate journals and to hand in reports of their exploits on their return. They were also ordered to take possession of the countries visited by a formal act of annexation, much as Dollier and Gallinée had done on the shores of Lake Erie.

When Dollier's expedition returned Talon waxed enthusiastic over the result, and wrote the King telling him of the hopes it had awakened. In describing the possibilities of Canada as a highroad to the west he said: "This country is so situated that by the river [St. Lawrence] one can ascend everywhere thanks to the lakes which have their sources in the west, and the rivers that flow into it on its sides. This opens the road to the north and south. It is by this same river that we hope to find some day the road to Mexico, and it is to the first of these discoveries that we, M. de Courcelles and I, have sent M. de La Salle, who is anxious for these enterprises, while, in another direction, I have sent the Sieur de Saint-Lusson to push towards the west as long as he can find something on which to subsist, with orders to search carefully if there is some communication by lakes or by rivers with the South Sea that separates this continent from China; after, however, he has first bent his efforts to the discovery of copper mines which is the principal object of his mission and he has verified the reports that have been given him on this subject." ²⁷

Colbert heartily approved of Talon's purpose in sending Saint-Lusson to the northwest to find a route to the South Sea, but he was careful to caution the intendant not to let himself be carried away by his love of adventure, as the principal object of these expeditions was the location of copper mines, a source of wealth that would draw many colonists to Canada. Saint-Lusson, accordingly, was sent out with orders to take possession in his Majesty's name "of the territories lying between the east and the west, from

Montreal as far as the South Sea, covering the utmost extent and range possible." He does not appear to have made any serious attempt to discover a route to the sea; probably the act of taking possession of the territory to the northwest was all that was really expected of him. He ascended the Ottawa to Lake Huron and landed at the Sault Ste. Marie, and here the ceremony of asserting the royal suzerainty took place in June, 1671. Indian tribes living within a radius of one hundred leagues were summoned as witnesses to the claims of France. The escutcheon and cross were erected, and after a suitable religious exercise had been performed, Saint-Lusson stepped forward and read the proclamation annexing this vast territory to the French colonial empire, as far as the western and southern seas.

Talon was elated over the success of this undertaking, for he considered, in the light of existing geographical knowledge, that he had taken possession of substantially the entire continent, save those portions already held by England, Holland and Spain. Such an act was, of course, valid only in so far as it could be enforced, but it constituted a claim on the surrounding country that would lend the colour of legality to any attempt to enforce it against a foreign power. The extent of the region claimed, therefore, was of little moment, though it is probable that if Talon had known the vastness of his preposterous claim it would have tickled his sense of humour. In notifying the King of Saint-Lusson's annexation Talon gives what he considers an estimate of the size of the western territory. "It is believed," he says, "that from the place reached by the Sieur de Saint-Lusson it is no farther than three hundred leagues to the extremities of the regions bordering on the Vermilion or South Sea. The lands bordering the Western Sea do not appear to be farther away from those discovered by the French, according to the supposition based on the reports of

savages and by maps, it seems that it is no more than fifteen hundred leagues navigation that must be made to reach Tartary, China and Japan. These sorts of discoveries must be the work either of time or of the King.”²⁸ With the Western Sea so near can we wonder that it acted as a continual lure to the adventurous, and that a route to it should be considered as having inestimable value in the struggle for commercial intercourse with the East?

Governor Courcelles was a loyal backer of Talon in the latter's encouragement of exploration. We have seen his interest in La Salle's voyage, and now he undertook to establish the work of exploration on a firmer basis. He organised an expedition in 1671 to select a suitable site on Lake Ontario for a fortified post in order to draw the Iroquois fur trade away from New Netherland and deflect it towards Canada. He had also another object. Dollier and Gallinée had brought back news of a river greater than the St. Lawrence, called the Ohio by the Iroquois and the Mississippi by the Ottawas, which was larger, so they said, than the St. Lawrence, and which flowed from east to west. The governor found by an examination of the available maps of New Sweden, the Floridas, Virginia and Mexico that they failed to show the mouth of a river of such magnitude, and so, he reasoned, it must fall into some other sea, probably after flowing through the rich lands of New Spain. As the shortest way to reach this river was by Lake Ontario, the establishment of a post on this lake would, in the governor's opinion, greatly facilitate communication with the Ohio.

Besides the routes to the South Sea Talon occupied himself with discovery to the north. An experienced navigator of Dieppe, named Captain Pouillet, obtained his ear for a scheme to find a communication between the north and south seas either by Davis Strait or by sailing through the Strait of Magellan and attacking the problem from the western

side. Talon considered the proposition seriously and referred the captain to Colbert, who replied with an offer to give the matter careful thought and to lay it before the King. Other navigators approached the intendant with similar schemes. But nothing was done about these propositions, for it was more in accordance with French policy to push across the continent than to venture upon hazardous maritime enterprises.

For some time the curiosity of the Canadians had been stirred by reports of the bay to the north, and there was eagerness to learn its exact location in reference to the St. Lawrence, its distance from that river, and also what tribes dwelt on its shore. Presently news came of the arrival of two strange ships to open trade with the savages of the bay. This roused Talon to action, for such a policy on the part of a foreign nation might seriously threaten the fur business of Canada. He immediately dispatched Father Albanel and the Sieur de Saint-Simon, a young Canadian gentleman, to push as far as Hudson Bay, make notes on all they discovered, and arrange trading agreements with the Indians. Especially was Albanel instructed to see if there was a suitable place to winter which might be used as a half-way station, where boats could be revictualled when they went on a search for a passage between the seas. Albanel was successful in bringing his journey to a satisfactory conclusion. He ascended the Saguenay to Lake St. John, entered the Chamouchouan River which led him through a chain of lakes and rivers to Lake Mistassini. Here he crossed over to the Rupert-Martin Rivers that carried him to James Bay. But he arrived too late; the English were already there. He therefore returned to Quebec, and the French, seeing the inadvisability of attempting to set up a rival enterprise in the northern regions, abandoned all efforts to find a route to the Western Sea through the bay.

Talon now began in earnest the work of finding the river leading to the South Sea. He had informed Colbert and the King of his intentions, and had met with a sympathetic reception from them. "Since, after the increase of the colony of Canada," wrote Colbert to him, "there is nothing more important for that country and his Majesty's service, than this discovery of a passage to the South Sea. His Majesty wishes that you would offer a handsome reward to those who make this discovery; but it seems that this may be a difficult undertaking for the inhabitants of that country as it can only be accomplished with ships, and there are only a small number of them there."²⁹ In carrying out his project Talon soon had the co-operation of a man no less enthusiastic than himself, and one to whom a great amount of credit is due for his share in the work of adding the vast territory of Louisiana to the French Crown. This was the new governor, Count Frontenac, who succeeded Courcelles in 1672. Like his predecessor, Frontenac was greatly interested in the extension of the Canadian empire, and he threw himself heartily into Talon's schemes for opening up the western country.

Chief among the projects of Talon was the expedition dispatched under Louis Joliet, a Canadian of moderate ability but well versed in the business of travelling in the wilderness, to solve the mystery of the Mississippi River. As collaborator with Joliet Talon selected Father Jacques Marquette, a man whose activities in the mission fields of the West had filled him with a desire to assist in this particular work of discovery. The plan received the sanction of Frontenac, who, like the intendant, saw the value of the undertaking. Frontenac, it appears, was actuated by two motives when he approved the expedition: one, the solution of the route to China by the river which was generally believed to flow to the Vermilion Sea, and the other, a desire to verify

reports of the proximity of the kingdoms of Thequaio and Quivira to the frontier of Canada, in which countries gold mines were said to exist.⁸⁰

The travellers left the mission of St. Ignace at Michilimackinac on the seventeenth of May, 1673, and skirted the northern shore of Lake Michigan, passing to the head of Green Bay. Here they embarked on the Fox River, which they ascended, passing through Lake Winnebago to the upper reaches of the Fox, on which they pushed their way through the wild rice and vegetation that chokes its passage to the portage leading to the Wisconsin River. At this point navigation was easier, and drifting down the current of the Wisconsin they reached the Mississippi on the seventeenth of June. Here at last was the mighty stream leading to the South Sea. What wonder Marquette wrote in his journal that he entered it with "a joy that I cannot express." Turning their canoes southward the explorers glided easily down the waters of the great river, stopping now and then to note some interesting bit of country on the banks and to take observations for latitude, for Marquette was well versed in the art of ascertaining his position in the wilderness. As the river flowed in a general southerly direction it seemed likely that it would debouch into the Gulf of Mexico, hence a careful watch was kept on the western shore to discover a river offering a line of communication with California and the South Sea. On reaching the Missouri the explorers' attention was at once arrested by its size and the great volume of its current, and they stopped to inquire if it led to the object of their search. Marquette in his journal describes it as "a river of considerable size, coming from the northwest, from a great distance; and it discharges into the Mississippi." "There are many villages of savages along this river," he says, "and I hope by its means to discover the Vermilion or California Sea. Judging from the direction of the course

of the Mississippi, if it continue the same way, we think that it discharges into the Mexican Gulf. It would be a great advantage to find the river leading to the southern sea, toward California; and, as I have said, this is what I hope to do by means of the Pekitanoui [Missouri], according to the reports made to me by the savages. From them I have learned that, by ascending this river for five or six days, one reaches a fine prairie, twenty or thirty leagues long. This must be crossed in a northwesterly direction, and it terminates at another small river,—on which one may embark, for it is not very difficult to transport canoes through so fine a country as that prairie. This second river flows toward the southwest for ten or fifteen leagues, after which it enters a lake, small and deep, the source of another deep river which flows toward the west; where it falls into the sea. I have hardly any doubt that it is the Vermilion Sea, and I do not despair of discovering it some day, if God grant me the grace and the health to do so, in order that I may preach the Gospel to all the peoples of this new world who have so long grovelled in the darkness of infidelity.”³¹

Belief that the Mississippi was the great river leading to the South Sea was now fast crumbling, and when the explorers reached the mouth of the Arkansas it received its final blow. Here the Indians assured them that they were no more than ten days' journey from the sea,—though Marquette reduced the distance to two or three—and they halted to decide whether or not to continue their voyage until they came to the gulf. “Monsieur Joliet and I held another council,” says Marquette, “to deliberate upon what we should do—whether we should push on, or remain content with the discovery which we had made. After attentively considering that we were not far from the Gulf of Mexico, the basin of which is at the latitude of 31 degrees 60 minutes, while we were at 33 degrees 40 minutes, we judged that we

could not be more than two or three days' journey from it; and that, beyond a doubt, the Mississippi River discharges into the Florida or Mexican Gulf, and not to the east in Virginia, whose sea-coast is at 34 degrees latitude,—which we had passed, without, however, having as yet reached the sea,—or to the west in California, because in that case our route would have been to the west, or the west-southwest, whereas we had always continued it toward the south." Realising the difficulties and hazards that might be encountered by continuing down the stream the explorers turned about and in due course reached Lake Michigan by the Illinois River.

The mystery of the Mississippi was now solved, but the South Sea was as far away as ever. Governor Frontenac reported the results of the expedition to Colbert, pointing out to him the possibility of reaching the elusive Vermilion Sea by the Missouri River. But unfortunately the home government did not now regard exploration with as friendly an eye as it had during the administration of Governor Courcelles. The King was engaged in a war with Holland that engrossed his attention and consumed a large share of his available funds. Moreover, he wished to concentrate his colonists in the east where they would be able to protect themselves in case of danger. He disapproved of a policy of expansion which would spread settlements over a vast territory where they might easily be destroyed; nor did he see the advantage of discovering regions too far remote to be colonised. Colbert, in writing to Frontenac, pointed out two exceptions to this rule. First, if the territories to be acquired were useful to commerce and might be taken by another nation to the detriment of French trading interests; second, if the new countries opened a communication with the Atlantic farther south than the mouth of the St. Lawrence, which river, being so far north, permitted access for

only about six months in the year. Louis evinced no interest in a route to the South Sea.

Fortunately for the cause of exploration Frontenac did not wholly share the views of his sovereign. Though instructed to push forward the work of colonisation he was interested more in schemes for the aggrandisement of his colonial empire by means of explorers and *coureurs de bois*. As an initial step in his policy Frontenac accompanied by La Salle ascended the St. Lawrence and established a fort at Cataraqui on the site of modern Kingston. This post would serve, he believed, the double purpose of attracting Indian trade and of securing a station on the route to the west. La Salle, now firm in Frontenac's friendship, departed for France with a letter to Colbert recommending him as a man familiar with the state of Canada and possessing the necessary courage and ability to undertake a voyage of discovery.³² He was well received at court, his petitions were granted, and by letters patent he was given Fort Frontenac, as the post at Cataraqui was called. He was also made a member of the untitled nobility. On his return to Canada La Salle went to his newly acquired possession on Lake Ontario, where he busied himself for some time in adding to the buildings of Fort Frontenac and organising a small colony. But the spirit of discovery was ever in him, and the year 1678 saw him again in France to request permission to undertake his darling project. He pointed out that Fort Frontenac gave many facilities for discovery in the new countries, and he proposed to push his way farther westward. He also wished to inaugurate a trade in buffalo hides, but as it would be difficult to bring such goods to Quebec by canoe he asked of Colbert permission to discover the mouth of the Mississippi, as this river would offer an easy means of conveying his hides to tidewater.³³ His petition had the good fortune to find favour in the eyes of the King, who had just refused Joliet permis-

sion to settle in the Illinois country; and so Louis, by the Grace of God, granted his "dear and well beloved Robert Cavelier, Sieur de La Salle" a commission because, as the document reads, "there is nothing we have more at heart than the discovery of this country, in which it appears that a route can be found to penetrate as far as Mexico."³⁴

Armed with these documents La Salle returned to Canada and began his preparations in earnest for the voyage down the Mississippi. It was well known by this time, thanks to the work of Joliet and Marquette, that the Mississippi flowed into the Gulf of Mexico and could not in itself be a route to the South Sea. Yet La Salle had hopes of using it later as a stepping stone, for Marquette had reported a river flowing into it from the west which the Indians had assured him would lead to the southern ocean. Father Louis Hennepin, the Recollect friar who accompanied La Salle on the expedition, comments thus on his leader's intentions: "Our design was to endeavour to find out, if possible, a passage from the northern to the South Sea without crossing the Line [equator], which a great many have hitherto sought in vain. The River Mississippi does not indeed run that way, but however M. de la Salle was in hopes to discover by means of the Mississippi, some other river running into the South Sea, and knowing his great courage and ability, I don't question but he would have succeeded, had God been pleased to preserve his life. As that unfortunate gentleman was about it, he was murdered; and if the divine Providence has spared me, 'tis it seems, that I may acquaint the world with a short way to go to China and Japan, which I hope may be done by means of my discoveries: therefore if his Majesty of Great Britain, or the States General [of the Netherlands] are willing to send anybody to find out that so much talked of passage, and that I may accompany them,

I am morally sure that by the Grace of God, we shall succeed before the end of this age.”⁸⁵

La Salle began his operations by dispatching Father Hennepin, who had been selected to look after the religious side of the expedition, to the Niagara River to choose a suitable place for establishing headquarters for the project he was about to undertake. He himself followed shortly afterwards and began work on the construction of the *Griffin*, a vessel that was to take them across the Great Lakes. While work on the little ship was in progress, La Salle was obliged to return to Fort Frontenac on pressing business, but during his absence the vessel was completed and launched. Spring wore away and the summer was half spent when the commander returned. On his arrival the explorers embarked and set sail for the west. They took the usual route through the Great Lakes, and presently came to Green Bay where they took to their canoes after loading the *Griffin* with a supply of furs, collected by the vanguard of the party. The season was now advanced and La Salle hastened up Lake Michigan anxious to reach a place where he might settle before the winter set in. December (1679) had arrived by the time the party entered the St. Joseph River and made their way to the Kankakee and Illinois. Reaching the site of modern Peoria, La Salle halted and established his winter quarters, and built for protection against the Indians the fort he named Crèvecœur. While encamped at this spot troubles, such as usually occur among men who are obliged to remain idle, broke out among La Salle's followers. The Illinois Indians, who regarded the plans of the French with a certain amount of hostility, added to the mischief by using all their eloquence to persuade them that the river was inaccessible. Fortunately, La Salle met a young savage who was returning from what he believed was the South Sea

(it was probably the Gulf of Mexico) and, gaining his confidence, obtained from him a complete description of the Mississippi. With this information he faced the Illinois and accused them of misrepresentation, asserting that the true nature of the route had been revealed to him. This bold action put a quietus on further attempts by the Indians to interfere with his plans. Shortly afterwards several tribes came to Fort Crèvecœur who brought news of the Mississippi and made friendly advances to the French. "From another direction, on the seventeenth of February," says La Salle in one of his letters, "two of the most prominent of the Matoutentas nation, who live eighty or a hundred leagues westward, came to see us. One of them had a horse's foot hanging on his belt, which he said he had brought from a country which is five days' journey towards the west, the natives of which fight on horseback, have lances for weapons and long hair." Another tribe called the Chaa invited the French to visit them in the upper waters of the Mississippi, saying they were near the Western Sea.³⁶

Meanwhile, La Salle had been anxiously awaiting news from the *Griffin* which he expected would bring the necessary rigging and supplies for the vessel he was to build at Fort Crèvecœur for his journey down the Mississippi. But his hopes were in vain; the *Griffin* was never heard of after she disappeared from sight in Green Bay. The explorer, therefore, determined to set out for Fort Frontenac in a canoe and bring back the materials needed. Before starting out, however, he made arrangements whereby his party should improve the time until his return. He selected Father Hennepin, who was blessed with an adventurous spirit, and assigning to him two companions, Michel Accau and Picard du Gay, to accompany him on a reconnoitring expedition, he saw them off on the last day of February.

Hennepin glided down the Illinois to its junction with the

Mississippi and there turned his canoe up the stream. Some weeks later, as the friar was resting on the shore, a party of Sioux warriors suddenly pounced on him and his companions and made them prisoners. Their situation was alarming, for the savages acted in a decidedly unfriendly manner, indeed, there was a lively discussion among them as to whether or not they should put the Frenchmen to death. But moderation prevailed, for the Indians saw the advantages of trade with the white men, and the folly of treating its pioneers with harshness. Nevertheless, they kept the Frenchmen prisoners and carried them off up the river.

There was at this time on the upper waters of the Mississippi a French explorer named Greysolon du Lhut. This man had but recently come to Canada, and having a natural bent for a life of adventure, he determined to head an expedition to the northwestern part of Canada. "My object was," he says in a memoir addressed to Colbert's son, the Marquis de Seignelay, "to push on to the sea situated to the west-northwest which is believed to be the Vermilion Sea, from which the savages, who had gone to war in this direction, had brought some salt to three Frenchmen whom I had sent on a voyage of discovery, and who brought me the said salt, having told me that the savages had told them that it was but a twenty days' journey from where they were to find the great lake, the water of which is worthless as a beverage."⁸⁷ Du Lhut had left Montreal in September, 1678, and proceeding up the Ottawa River to Lake Huron, had reached, in due time, the villages of the Sioux in the vicinity of the Mississippi. It was here that news was suddenly brought him of the capture of three white men by the Sioux. Fearing they might be Englishmen or Spaniards encroaching on French preserves, he hastened down the river and reached the town where Hennepin was held captive. Du Lhut upbraided the Sioux for their lack of hospitality and for the

hardships they had visited on his countrymen. His words, fortunately, had some effect, for the French were from that time on treated with more consideration.

Towards autumn Hennepin left the Sioux with whom he was now living amicably and started for home, going by way of the Fox-Wisconsin portage to Green Bay and then along the usual route by the Ottawa River. Du Lhut, strange to say, now abandoned his plan of pushing through to the sea. The reason he gives, if it is the true one, is that the insults offered to Hennepin were a slight upon the French people, and that this prevented him from continuing friendly relations with a tribe guilty of such an offence. He therefore felt obliged to retrace his steps instead of keeping on towards the west.

Father Hennepin returned to France, where he drew up a narrative of his exploits. He appears to have been thoroughly convinced of the possibility of attaining the sea by a route across the continent, and by such a route only, for he points to the failure of the many attempts to find a passage by the frozen sea. He concludes that such an undertaking can never meet with success until the continent between the sea and New Mexico has been explored. From France the Father passed to the Netherlands where his accounts roused interest and commanded attention. Speaking of the influence he had on geographers of that country—the friar was not known for his modesty—he says: “Those who are skilled in geography have long ago suspected that Japan is contiguous to the lands of northern America; and the learned Grævius, so well known in the commonwealth of learning, having carefully examined our discovery, was pleased to tell me very lately in a meeting of *vertuosi*, in this city of Utrecht, that he was of my opinion, and did not think that Japan was an island, as it is commonly said, but that it joins with the large country I had discovered. . . . The English and Dutch

have in vain attempted to find out a passage to China and Japan through the Frozen Sea, but if they are pleased to send me about it, I am confident that I shall find some great river running into the Pacific Sea, whereby, and by means of the Meschasipi, it will be easy to trade and have communication with China and Japan without crossing twice the Line: and losing abundance of men." Father Hennepin also offered evidence to refute the belief in the Strait of Anian, for he considered the northern sea completely shut off from access to any western ocean; the only route leading to the Pacific, and incidentally to Japan, lay, in his opinion, across the American Continent, and must be travelled by means of rivers flowing westward to the Pacific. We shall have occasion later to elaborate Hennepin's views when we take up the discoveries west of the Mississippi.

During Hennepin's excursion to the upper Mississippi, La Salle had reached Fort Frontenac. While making arrangements to relieve the garrison he had left at Fort Crèvecœur and to collect supplies for his coming voyage down the great river, he was startled by news which was brought him by two *voyageurs*, that after he had left Fort Crèvecœur a mutiny broke out among the men. All had deserted, after burning the fort, save his lieutenant, Tonty, and a few trustworthy subordinates. Yet La Salle despite his misfortunes was not disheartened. The following year (1681) he organised another expedition and joining Tonty at Michilimackinac headed his canoes for the Chicago River. The year was drawing to its close as he made the portage from the Chicago to the northern branch of the Illinois, on which he paddled slowly downstream and entered the Mississippi on the sixth of February. With the details of La Salle's journey down the river we need not concern ourselves as they have no direct connection with our subject. The narratives covering the voyage make no mention of the possi-

bilities of reaching the South Sea. The course of the Mississippi was too well known from the accounts of Marquette and Joliet to permit any one familiar with American geography to believe that the river would lead anywhere but to the Gulf of Mexico. On the sixth day of April the party reached the spot where the river divides into three channels before it precipitates itself into the sea. The travellers separated, and La Salle, taking the western branch, glided down its current until he reached the waters of the gulf. Then uniting again with his followers he took possession of the great basin of the Mississippi in the name of his sovereign, Louis XIV.

How was this great achievement, this victory over a thousand obstacles, received? Governor La Barre, who succeeded the great Frontenac during La Salle's absence, wrote to Colbert when he heard of the discovery: "The sieur de La Salle has caused Sieur Tonty to write that he has discovered the mouth of the Mississippi in the sea. I have received no news of it since my arrival. He was ill. I do not think much of this discovery unless I understand it better, because it is surely the River of *Espiritu Santo* [river flowing into Mobile Bay] in the Gulf of Mexico on the 21 degree of latitude. Moreover, I have no interest in discovery, but only in making affairs profitable and preventing the English from ruining our commerce, but without making a great fuss about it and to put down the Iroquois."⁸⁸ And the King answered in the same vein, saying that he too was persuaded that the discovery was quite useless and that it would be well to discourage such enterprises in the future.

The discovery of the mouths of the Mississippi marks the end of one period of French exploration. At last it was known that the great western river, rumours of which had been current throughout Canada for so many years, led, not to the Pacific Ocean or to a branch of it, but to the Gulf of

Mexico, where communication with the west was cut off by an impenetrable barrier of land. The route to the South Sea seemed as remote as ever; indeed, an immense territory, two thirds of the continent, lay between the Mississippi and the Pacific. Fortunately, this fact was unknown to the French. They had no conception of the vastness of the region before them, still less did they know of the great wall of the Rocky Mountains which lay between them and the sea. Had these facts been known they might have settled down in an apathy of despair, and the story of western exploration would have been far different. As it was the government, which already regarded expansion with disfavour, now committed itself to a policy of discouraging it altogether. La Salle's expedition had failed to discover a route to the sea and the King, acting under advice of his ministers, condemned it as a useless enterprise. When interest in the South Sea revived again in the eighteenth century—an interest fostered more by a few adventurous souls in New France than by the government—French exploration entered upon a new phase, that is the search for a river whose source lay near a stream flowing to the Western Sea. During this phase we find in the narratives of voyages made in search of this river a strong current of imposture. The records range from the sublime to the ridiculous.

CHAPTER VI

THE ENGLISH CROSS THE APPALACHIAN BARRIER

Interest in a route to the Western Sea revived in Virginia.—Mysterious Englishman attempts to find the Northern Ocean through Canada.—Edward Williams summarises Indian reports of a sea to the west.—Map of Domina Virginia Ferrar.—Governor Berkeley becomes interested in discovery.—Explorations of John Lederer.—Abraham Wood dispatches Batts and Fallam.—Letter of John Clayton.—Map of Cadwallader Jones.—Expedition of Governor Spotswood.

WE left the Virginia colony comfortably settled on the Atlantic coast and thoroughly engrossed in the profitable business of tobacco growing. Such an enterprise, while of great value to the prosperity of the settlement and the enrichment of the mother country, was not conducive to exploration. The planters and their servants were contented to stay near the coast where they could carry on their agricultural pursuits without fear of molestation by the savages, for an Indian massacre in 1622 had taught them the necessity of clinging together for the sake of security instead of spreading out into the interior where defence would be difficult. In other words they adopted the policy of concentration which Louis XIV tried so strenuously to enforce on his Canadian subjects.

We find from time to time, however, during the period immediately following the acquisition of the colony by the Crown, that is after 1624, scraps of information dealing either with voyages or with descriptions of the inland country, but chiefly with the latter, showing the fascination which the route to the South Sea had for certain Englishmen. There is a story, published in 1627, telling of Henry Fleete,

a colonist who came to Virginia six years earlier, and ascended the Potomac to the present site of Washington where he was captured by Indians and taken by them on their migrations, or, at any rate, he wandered about in the wilderness for several years. Little is known of his adventures, and the story, as we have it, smacks of exaggeration. In the letter containing the account of Fleete's adventures we find the following passage relating to him. "Here is one whose name is Fleete, newly come from Virginia, who being lately ransomed from the Indians, with whom he hath long lived, till he hath left his own language, reporteth he hath oftentimes been within sight of the South Sea; that he hath seen Indians besprinkle their paintings with powder of gold;—that he had likewise seen rare precious stones among them, and plenty of black fox, which of all others, is the richest fur."¹ Fleete, of course, never reached the South Sea, though he may have accompanied his captors to the Gulf of Mexico, but the mention of gold and precious stones makes one cautious in accepting the account at face value. Too little is known of the incident to permit any definite opinion being expressed.

Years later we find in the *Relation* of the French missionary, Father Le Jeune, a curious account of an Englishman who came overland from New England to Canada in search of a northern sea. Who this man was we have no means of knowing. He appears suddenly among the Canadians, tells them of his plans, and vanishes as mysteriously as he came. "On the twenty-fourth of June [1640]," writes Le Jeune, "an Englishman arrived here with one of his servants, brought in canoes by twenty Abnaquiois savages. He departed from the lake or river Quinibequi [Kennebec] in Lacadie [Acadia], where the English have a settlement, to search for some route through these countries to the sea of the north. Monsieur the Governor, having learned of this,

did not permit him to come to Quebec; he sent him away, guarded by some soldiers, enjoining him to hasten his return. He set about doing so, but some of the principal savages who had brought him having fallen sick, and the streams and brooks by which he had journeyed having dried up, he came and threw himself into the hands of the French to avoid the death that he could hardly escape on his return, so horrible and frightful are the roads. Monsieur de Montmagny had him taken to Tadoussac, that he might return to England by way of France. The good man related some wonderful things to us about New Mexico. 'I have learned,' said he, 'that one can sail to that country through seas that are north of it. For two years I have ranged the whole southern coast, from Virginia to Quinibequi, seeking to find some great river or great lake that might lead me to the peoples who had some knowledge of this sea which is to the north of Mexico. Not having found any, I came to this country to enter the Saguené, and penetrate, if I could, with the savages of the country, to the North Sea.' This poor man would have lost fifty lives, if he had had so many, before reaching this North Sea by the way he described; and, if he had found this sea, he would have discovered nothing new, nor found any passage to New Mexico."² This excerpt from the narrative of Le Jeune unfortunately does not throw enough light on the explorer and his work to enable us to determine what contributions, if any, he made to geographical knowledge. His wanderings, which appear to have been considerable, must have opened up to him a fairly broad vista and provided him with much valuable information, but we can find no trace of his influence on English exploration. The story serves merely to show that the English cannot be charged at this time with complete indifference to the geography of their newly acquired possessions.

While the English soon realised the impossibility of find-

ing a water passage through the continent in the middle latitudes they kept in touch with the general outline of their western territory by the reports which reached them from the French beyond the Alleghanies as well as from the Indians of the vicinity. From the former they learned of the Great Lakes which were believed to be connected either directly or indirectly with the South Sea; while from the latter they heard of rivers leading to the same goal. "The savages," says Thomas Morton of Massachusetts, in speaking of the great lake of the Iroquois, as Ontario was sometimes known, "the savages make report of three great rivers that issue out of this lake two of which are to us known, the one to be the Potomac, the other Canada [St. Lawrence], and why may not the third be found there likewise, which they describe to trend westward, which is conceived to discharge herself into the South Sea. The savages affirm that they have seen ships in this lake with four masts which have taken from thence for their lading earth, that is conjectured to be some mineral stuff. There is probability enough for this, and it may well be thought, that so great a conflux of waters as are there gathered together, must be vented by some great rivers: and that if the third river (which they have made mention of) prove to be true as the other two have done: there is no doubt but that the passage to the East India, may be obtained, without any such dangerous and fruitless inquest by the northwest, as hitherto hath been endeavoured." ³ The third river referred to is probably the Ohio-Allegheny, for the Potomac could not by any stretch of the imagination be made to rise in, or even near, Lake Ontario. If the Ohio-Allegheny is indeed the stream described by Morton as trending westward, he would then have a continuous waterway to the Gulf of Mexico, though he assumes the western river would lead to the South Sea.

As further evidence of the belief in a route across Vir-

ginia we have a pamphlet published in 1650 by Edward Williams which analyses the resources of that colony, and loudly sounding their praises, concludes, after sketching the value of the colony itself, with a promise that it offers "a most compendious passage to the discovery of these more opulent kingdoms of China, Cochin-China, Cathay, Japan, the Philippines, Sumatra, and all those beauteous and opulent provinces of the East Indies, which beyond dispute lie open to those seas which wash the southwest parts of Virginia, through whose bosom all those precious commodities will flow." ⁴ Williams's purpose is to show Virginia as a land of milk and honey where Oriental goods may be grown, for he believes this portion of the American Continent offers the same climatic conditions as China. Further, as he points out, there is strong probability of access to the South Sea, and hence to China and the Indies through Virginia, so that the colony can become an entrepôt for trade to the Far East, if the production of Asiatic goods in Virginia is not satisfactory. In indicating the location of the route to the South Sea and the distance from the James River to it the writer is precise. "The Indians unanimously consent," he says, "that twenty-two miles beyond the Falls [of Richmond], is a rock of crystal, and this they evidence by their arrows very many whereof are headed with it. And that three days' journey from thence, is a rock or hill of silver ore. Beyond which, over a ledge of hills, by a concurrent relation of all the Indians, is the sea, which can be no other but that sea which washes the shore of China, etc. That this report of a great sea southwest beyond the mountains, cannot have the least of fiction or confederacy, since all the Indians from Canada to Florida, do unjarringly agree in the relation, is obvious to the meanest apprehension."

The unanimous opinion of the Indians living between Canada and Florida would seem to prove the existence of the

sea beyond all doubt, and Williams cannot be blamed for laying his plans accordingly. To reach the Pacific he suggests a gradual approach over the mountains. A sudden dash, he thinks, would necessitate a large number of men to act as escort through unknown and possibly hostile countries, and these would require a good supply of provisions. Such a contingent would also find it difficult to keep its movements hidden from the Spaniards, who would do anything to prevent the success of the enterprise—at least such was Williams's opinion. On the other hand Williams's scheme for accomplishing the discovery was to establish posts at stated intervals along the line of march, to act as relief stations for those engaged in exploration. The possibility of finding a suitable river beyond the mountains, which would carry travellers directly to the South Sea, was likewise suggested. "Though we may entertain grounds of hope and confidence," says Williams, "that this discovery of the South Sea may be made without any tedious land journey, since it is certain that from the great confluence of waters in the Gulf of St. Lawrence, four mighty rivers receive their source, the first whereof pouring itself north into Canada, another running eastward into the sea called Hudson's River, the third [Allegheny-Ohio] running westward into the main are already discovered, but the fourth upon which we have reason to fix high expectation bending southward to Florida, washes all the backside of Virginia, and may in all probability discharge itself into the South Ocean, which if it suit with our conjectures, Virginia will have by that means a double accession of security and convenience."

As the geographical descriptions we have cited of the waters of Virginia, especially of those supposed to lie on the western side of the mountains are apt to produce confusion in the reader's mind—so different are they from actual facts—we give herewith the map by Domina Virginia Ferrar

(1651) which will assist him in forming an idea of the English conception of the Virginia territory during the middle of the seventeenth century. How crude was the state of English geographical knowledge of the American Continent may be seen by comparing this chart with the French map, Sanson's *Amerique Septentrionale*, published simultaneously. Running across the western terminus of the country Domina Virginia has drawn a mountain range from which flow all the rivers debouching into Chesapeake Bay, as well as those that irrigate the modern state of North Carolina. Delaware River is also included in the general group. Hudson River, however, shows a little different treatment. It has a common source with the St. Lawrence, or River of Canada, in a body of water called, "a mighty great lake." This lake opens into the South Sea, and in order that there may be no doubt of this being the South Sea, the author says in an inscription: "Sir Francis Drake was on this sea and landed anno 1577 in 37 deg. where he took possession in the name of Queen Elizabeth calling it New Albion, whose happy shores, (in ten days' march with 50 foot and 30 horsemen from the head of James River, over those hills and through the rich adjacent valleys beautified with as profitable rivers which necessarily must run into the peaceful Indian Sea) may be discovered to the exceeding benefit of Great Britain, and joy of all true English." The South Sea is shown almost contiguous to the mountain range. One had but to ascend a river, any river in fact, and cross a ridge of hills to find oneself on the shores of that ocean ready to sail to China. The map was compiled solely from English sources, or better from Virginian sources, save for a hint or two regarding the River of Canada; and no effort is made to reconcile the information received from these sources with the more extensive knowledge of the French and Spaniards.

With the arrival of Sir William Berkeley as governor of

The Sea of China and the Indies.



Sir Francis Drake
was on this sea and landed
Jan. 1577 in 22 days where he took

possession in the name of Q.
Elizabeth first (in her 15th year) and so he
went home to England in 1580 and was
made knight and received his honors and
a pension for his service.

Elizabeth first (in her 15th year) and so he
went home to England in 1580 and was
made knight and received his honors and
a pension for his service.

Scala Militarum

A map of Virginia discovered to ye M^l. and
S^l of La^l. From 15 day to 25th after
Drake's 40 day: bounds of new England.



(Courtesy of Houghton, Mifflin & Co.)

DOMINA VIRGINIA FERRAR. A Mapp of Virginia discovered to ye Hills. 1651.

Virginia in 1641, there seems to have been a revival of interest in exploration. This may have been in a large measure coincidental, for the governor does not appear to have made any ventures in discovery during his first administration. A suggestion made at this time for a voyage of exploration is found in a petition presented to the Assembly the year of Berkeley's arrival, requesting permission "to undertake the discovery of a new river or unknown land bearing west southerly from Appomattox River." The petition does not appear at the time to have disturbed the leisure of the august body to whom it was addressed, for it was not until early in 1643 that we find it referred to again. Then a measure was passed granting to the petitioners for the next fourteen years the profits accruing from such an enterprise, one fifth of the produce from the mines being reserved for the Crown.⁵ No mention of this project is found in Berkeley's papers.⁶ The following year an Indian insurrection occurred which discouraged all ventures of this nature until peace was restored and the English felt more confidence in their savage neighbours. Yet in the long run Indian disturbances were helpful to the cause, for they stimulated the building of forts on the frontier, which served to keep the Indians in subjection, and which could be used as bases of supply in the work of exploration.

Governor Berkeley, after a brief absence from Virginia, returned for his second administration in 1645. During this term of office we find mention of an intended expedition for the discovery of the South Sea, which the governor was about to undertake at the instigation of various planters who hoped to derive profit from trade with the Far East. A document published in 1649 under the title, *A Perfect Description of Virginia*, is the source of our information. "That for matter of their better knowledge of the land they dwell in," says the writer, "the planters resolve to make a further

discovery into the country west and by south up above the Fall [of the James], and over the hills, and are confident upon what they have learned from the Indians, to find a way to a West or South Sea by land or rivers, and to discover a way to China and East Indies or unto some other sea that shall carry them thither; for Sir Francis Drake was on the backside of Virginia in his voyage about the world in 37 degrees just opposite to Virginia, and called Nova Albion, and by the natives kindly used: and now the question is only how broad the land may be to that place from the head of the James River above the Falls, but all men conclude if it be not narrow, yet that there is and will be found the like rivers issuing into a South Sea or a West Sea on the other side of those hills, as there is on this side when they run from the west down into an east sea after a course of one hundred and fifty miles.”⁷ One can see at a glance the similarity, almost the sameness, between this description and the outline of western Virginia on the Ferrar map.

Governor Berkeley early in 1648 was laying plans for organising an expedition, such as the one suggested above, on an impressive scale, and he was also arranging to lead it in person. In preparing for the enterprise he had sought from the savages information regarding the western country and the route across the mountains. “The Indians have of late acquainted our Governor,” says an anonymous letter written in March, 1648, “that within five days’ journey to the westward and by south, there is a great high mountain, and at foot thereof, great rivers that run into a great sea; and that there are men that come hither in ships, (but not the same as ours be) they wear apparel and have reed caps on their heads, and ride on beasts like our horses, but have much longer ears[;] and other circumstances they declare [make] for the certainty of these things. That Sir William [Berkeley] was here [engaged] upon preparing fifty horse and

fifty foot, to go and discover this thing himself in person, and take all needful provision in that case requisite along with him; . . . for it must needs prove a passage to the South Sea (as we call it) and also some part of China and the East Indies.”⁸

Promising as were the prospects of seeing the governor lead an expedition, nothing was done to get it under way; indeed, nothing more is heard of the plan. Some mild interest in the business of exploration was shown by the home government, it is true, when the proposed discovery was turned over to the Committee of the Admiralty in September, 1651, but here it seems to have died a natural death. The Virginia Burgesses in 1652 repealed the act of 1643, and in its stead granted privileges of discovery to Colonel Claiborne and Captain Fleete for a period of fourteen years. A like privilege was also given to Major Abraham Wood, later an outstanding figure in westward expansion, and was confirmed to his associates.⁹ Governor Berkeley closed his second administration in 1652; and the mainspring of the machinery being removed by his departure, exploration fell into abeyance.

Years after the period we are now studying there arose a story that Abraham Wood reached the Ohio and the Mississippi in the year 1654. Wood had come to Virginia in 1620 as an indentured servant. He was a man of considerable talents and soon rose to a position of respectability, and eventually to one of prominence. He acquired enormous holdings in real estate in various parts of the colony; in fact, he seems to have had a craving for this form of investment. He was a member of the House of Burgesses, and was also elected to the Council. His correspondence, unfortunately, has not been preserved. The story of his voyage to the Ohio is first mentioned in a memorial of Daniel Coxe, Jr., to William III in 1699. The younger Coxe in his *Carolana* tells of

Wood's discovery of the branches of the Ohio and the Mississippi. Wood, it appears from Coxe's account, made more than one voyage to these rivers during the next ten years; but a careful investigation of the facts pertinent to the story shows the account to have been a misstatement on the part of Coxe. It was Wood's agents, not Wood himself, who penetrated to the Ohio, or its branches, and the voyages did not take place until 1671-4. The activities of these agents will be discussed presently.

The accession of the second Charles to the English throne marks the beginning of a renewed interest in adventure. The King brought in his train men of a restless nature who desired nothing better than the excitement of enterprises that involved risk and that promised large returns. In the reaction against the sober and steady-going followers of Cromwell, the adventurer, titled or untitled, found the opportunity to exercise his avocation. As examples of the great spurt of activity that seized hold of his subjects during the first decade of Charles's reign, we have but to mention the establishment of the Hudson's Bay Company, the capture of New Netherland, the granting of the Carolina charter, and the revival of exploration in Virginia. In Virginia the impetus to westward exploration was not furnished entirely by a desire to find the route to the South Sea; profits of the fur trade and the possibilities of gold and silver mines offered, when all is said and done, more immediate attraction than the distant enchantments of Asiatic commerce.

Berkeley was re-appointed to the governorship in 1659, on the eve of the Restoration. In taking up again the work of exploration he now moved forward on his own initiative, at least it is doubtful if he received any official encouragement from England, for the instructions issued to him in September, 1662, contain no reference to western discoveries. But though the King gave him no assistance, Berkeley deter-

mined to repay good for indifference and to do his sovereign "a memorable service." "I did this last spring," wrote Berkeley to Lord Arlington in 1669, "resolve to make an essay to do his Majesty a memorable service which was [to go] in the company of two hundred gentlemen who had engaged to go along with me to find out the East India sea, and we had hopes that in our journey we should have found some mines of silver; for certain it is that the Spaniard in the same degree of latitude has found many[;] but my lord unusual and continued rains hindered my intentions nor can I in reason be sorry for it though I am of that age that requires that very little time should be misspent yet I considered since; that though the motives to this voyage were only ardent intentions to do his Majesty service yet I had not his Majesty's commission to justify so bold an undertaking to this I added the memory of the misfortune of Sir Walter Raleigh. But my lord if his Majesty be pleased I shall prosecute this design [if he] will send me his commission to do it I shall next spring go with such a strength that shall secure me against all opposition. . . ." ¹⁰

The commission unfortunately was not forthcoming. Perhaps the King realised the political dangers in which such an expedition would involve him when his subjects crossed the mountains and encroached on territory which was being rapidly annexed, or better claimed, by the French; for Charles at this time was contemplating the alliance with France, which culminated the following year (1670) in the treaty of Dover. Berkeley therefore received no commission. In the spring of 1670, however, he determined to push forward his plans without one, and accordingly on the twenty-second of May he sent out a party of men under Major Harris to discover the western mountains. The journey was a short one; absent only eighteen days, of which twelve were spent in going and six in returning, the explorers

had a chance to see but little that was new. When they reached the Blue Ridge they saw in the distance a fog arising, as they assumed, from a morass or a great lake bounded by the hills, or possibly from a river, "and there," says the account, "we do suppose will be the end of our labour in some happy discovery which we shall attempt in the end of summer with provisions to pass the river, also to try for mines, being yet very confident that the bowels of those barren hills are not without silver or gold, and that there are rivers falling the other way in to the sea as well as this [river] to the east, I heartily pray that we may discover what may be satisfactory to his Majesty and for the honour and wealth of his kingdom."¹¹ Satisfied with this, they returned home without attempting any further discoveries such as the letter says they were planning.

The explorations of Dr. John Lederer, which we shall now take up, caused Englishmen to realise that the South Sea was not so near the western slope of the Blue Ridge as they had been led to believe. Lederer was a German physician with a strong interest in discovery. Nothing is known of his origin or early career; he appears in Virginia for only a year and a half, after which he went to Maryland, being driven from the former colony by popular anger at the subsidies granted him by the governor for his work; at least, such is his account. His veracity is questionable, but as a rule he did not attempt deliberate fabrication in narrating his adventures. His story was translated from its original Latin into English by Sir William Talbot, and dedicated by him to Lord Ashley, one of the patentees under the Carolina charter, for Lederer's voyages were presumed to open up an opportunity for the expansion of Carolina as well as Virginia. "My lord," began Talbot in his introductory letter to Ashley, "My lord, From this discourse [Lederer's Book] it is clear that the long looked-for discovery of the

Indian Sea does nearly approach; and Carolina, out of her happy experience of your lordship's success in great undertakings, presumes that the accomplishment of this glorious design is reserved for her. In order to [do] which, the Appalachian Mountains (though like the prodigious wall that divides China and Tartary, they deny Virginia passage into the west continent) stoop to your lordship's dominions, and lay open a prospect into unlimited empires."¹²

Lederer started on his first journey on March 9, 1669, from the falls of the Pamunkey River. Five days later he reached the Blue Ridge, and the following day crossed the Rapidan. Ascending the mountains, he spent several days wandering about among the snows in search of a pass, but unable to find one, he was obliged to abandon his attempt and return home. Nothing daunted, he made a second attempt in May of the following year. On this occasion he left the falls of the James and headed due west by compass. When he struck the James River again he altered his course so that it might bring him to the Sapony Indians on a branch of the Staunton River. On reaching the Sapony village he directed his steps southwest for a distance of fifty miles to an island in the Dan River, where he stopped at a town of the Akenatzzy (Occaneechi) tribe. "At my arrival here," he says, "I met four stranger Indians, whose bodies were painted in various colours with figures of animals whose likeness I had never seen; and by some discourse and signs which passed between us, I gathered that they were the only survivors of fifty, who set out together in company from some great island, as I conjecture, to the northwest; for I understood that they crossed a great water, in which most of their party perished by tempest, the rest dying in the marshes and mountains by famine and hard weather, after a two-months' travel by land and water in quest of this island of Akenatzzy. The most remarkable conjecture

that I can frame out of this relation is, that these Indians might come from the island of New Albion or California, from whence we may imagine [that] some great arm of the Indian Ocean or bay stretches into the continent towards the Appalachian Mountains in the nature of a midland sea, in which many of these Indians might have perished. To confirm my opinion in this point, I have heard several Indians testify, that the nation of Rickohokans, who dwell not far to the westward of the Appalachian Mountains, are seated upon a land, as they term it, of great waves; by which I supposed they mean the seashore.”¹³

Lederer in a measure was unconsciously reviving by this conjecture the old legend of the Sea of Verrazano, now modified greatly by the immense distance between the Atlantic Ocean and the “great arm of the Indian Ocean.” He does not give us at this point his ideas regarding the width of the land separating the Atlantic from the Pacific, but later in the narrative, when he has told of his third voyage, which took place in the summer of the same year and brought him again to the Blue Ridge, he gives the following opinion: “They are certainly in great error, who imagine that the continent of North America is but eight or ten days’ journey over from the Atlantic to the Indian Ocean; which all reasonable men must acknowledge, if they consider that Sir Francis Drake kept a west-northwest course from Cape Mendocino to California. Nevertheless, by what I gathered from the stranger Indians at Akenatzzy of their voyage by sea to the very mountains from a far distant northwest country, I am brought over to their opinion who think that the Indian Ocean does stretch an arm or bay from California into the continent as far as the Appalachian Mountains, answerable to the Gulfs of Florida and Mexico on this side. Yet I am far from believing with some, that such great and navigable rivers are to be found on the other side [of]

the Appalachians falling into the Indian Ocean, as those which run from them to the eastward. My first reason is derived from the knowledge and experience we already have of South America, whose Andes send the greatest rivers in the world (as the Amazon and Rio de la Plata, etc.) into the Atlantic, but none at all into the Pacific Sea. Another argument is, that all our water-fowl which delight in lakes and rivers, as swans, geese, ducks, etc., come over the mountains from the Lake of Canada, when it is frozen over every winter, to our fresh rivers; which they would never do, could they find any on the other side of the Appalachians."

At the time Lederer wrote this conjecture Marquette had not made his voyage down the Mississippi, and it is doubtful if Lederer knew of the Ohio River running westward to the sea from the vicinity of the Lake Ontario. His conception of western geography was, of course, crude, but at least he helped banish the idea of the close proximity of the South Sea to the Blue Ridge Mountains. Lederer's map throws no light on the question of the location of the South Sea; it shows merely the extent of the author's travels. From Lederer's account of the land beyond the mountains we gather that he considered the South Sea to be much farther from the Atlantic than was generally supposed, but out of deference to the account of the Indians at Akenatzy he concedes the extension of a bay of this sea to the foot of the Appalachians. Lederer added practically nothing to the current knowledge of the ultramontane regions or the location of a western sea. His denial of the existence of westward flowing rivers was an opinion contrary to actual facts, but it made only a slight impression. Hermann's map of 1670, designed just before Lederer's narrative was published, considers the Appalachian Mountains to be "the very middle ridge of northern America," and mentions in an inscription the existence of westward flowing rivers, especially

one large stream which is said to meet a branch of the Susquehanna. This refers, perhaps, to a connection with the Allegheny or one of its tributaries. Such, at any rate, was the state of geographical knowledge along the Atlantic seaboard in 1670.

Despite the meagre results of Lederer's three journeys, enthusiasm for obtaining access to the South Sea still waxed strong. The following year Abraham Wood sent out an expedition under Thomas Batts and Robert Fallam, the record of which is to be found in the latter's journal. "Thomas Batts, Thomas Woods and Robert Fallows [Fallam] having received a commission from the Honourable Major General Wood for the finding out [of] the ebbing and flowing of the waters on the other side of the Mountains in order to [accomplish] the discovery of the South Sea accompanied with Penecault a great man of the Appomatox Indians and Jack Weason, formerly a servant to Major General Wood with five horses set forward from the Appomatox's town about eight of the clock in the morning being Friday Sept. 1, 1671."¹⁴ The party proceeded due west, and on the fourth day reached the Saponi villages on Otter Creek near the Staunton River. Going twenty-five miles west by north, they arrived at an island in the Staunton, and the following day came in sight of the mountains. Keeping in the vicinity of the Staunton, they presently reached the Blue Ridge and struck the Roanoke River near the site of the modern city of that name. Remaining here for several days, the explorers secured a guide, who conducted them in a southwesterly direction across the divide to the headwaters of the New River, which flows into the Ohio. Here at last the divide had been crossed and they saw before them a stream flowing into a western ocean, and to make the matter more certain they found, or rather thought they found, on examining the banks of the river,

marks showing an ebb and flow of tide—proofs that the sea could not be far off. In addition to this there was further evidence which they discovered when they reascended the mountains over which they had come and paused on the summit and looked westward. In the distance they beheld a fog and glimmering light as from a body of water. Could this be the reflection of a great bay? Fallam at any rate thought so, and his belief was reinforced later when an Indian informed him that on the plain below was a place where salt was to be found. Surely they were not far from the sea.

Batts and Fallam were the last explorers to cross the Blue Ridge with the expectation of finding a river leading to the sea, that is, to a sea in close proximity to the western side of the mountains. Governor Berkeley, who had shown such commendable interest in western expansion, was soon engrossed in more pressing business at home by an Indian uprising which occasioned the revolt against his authority, known as Bacon's Rebellion. The half-crazed ferocity with which the governor suppressed this rebellion led to his recall, and with his departure the colony suffered the loss of the official mainspring of exploration, a loss which was, in the opinion of the colonists, fully compensated for by the good riddance of an otherwise tyrannical administrator. Abraham Wood, who had previously backed several expeditions, also disappeared from the scene, his last service being the negotiation of a settlement in 1680 with the Indians who threatened the peace of the community. A better understanding of the western country was now dawning upon the colonists. How far this was due in its first stage to the work of La Salle and his fellow-Canadians it is impossible to say, for a direct reference to French narratives does not appear until the end of the century. But the activities of the French in the Great Lakes were known, and presumably

the Virginians obtained from French sources a more intelligent conception of their hinterland. The Reverend John Clayton in a letter to the Royal Society (1688) gives a comprehensive survey of the physical characteristics of the country that shows considerable perspicacity, and he describes the interrelation of the westward flowing with the eastward flowing rivers in the following graphic manner: "The heads of the branches of the rivers interfere and lock one within another, which I think is best expressed after the manner that an Indian explained himself once to me, when I inquired how nigh [were] the rivers of Carolina, Virginia and Maryland [which] arose out of the mountains, from those that ran westerly on the other side of the mountains, he clapped the fingers of one hand 'twixt those of the other, crying, they meet thus; the branches of different rivers rising not past a hundred paces distant one from another: so that no country in the world can be more curiously watered." ¹⁵

The legend of the proximity of a western sea, or better, of a branch of it extending inland, had now given way to a more intelligent, though yet inaccurate and somewhat vague, account of a lake into which the western river flowed. "I shall here present you," wrote Clayton, "with a continuation of my remarks on the river, soil, and plants of Virginia. And first, as to the river on the other side of the mountains, said to ebb and flow. I have been assured by Col. Bird, who is one of the most intelligent gentlemen in all Virginia, and knows more of Indian affairs than any man in the country, that it was a mistake; for that it must run into a lake, now called *Lake Petite*, which is fresh water; for since that time a colony of the French are come down from Canada, and have seated themselves on the back of Virginia, where Fallam and the rest supposed there might be a bay, but is a lake, to which they have given the name of *Lake Petite*,

there being several larger lakes 'twixt that and Canada. The French possessing themselves of these lakes, no doubt will in short time be absolute masters of the beaver trade, the greatest number of beaver being caught there. The colonel told me likewise, that the common notion of the Lake of Canada, he was assured was a mistake, for the river supposed to come out of it, had no communication with any of the lakes, nor the lakes one with another, but were distinct." Colonel Bird's idea was somewhat hazy. He well realised the folly of such a theory as that of the proximity of the South Sea, but he had not sufficient information at his command to make a correct diagnosis of the situation. He knew of a lake (Lake Erie) on which the French were trading, and he erroneously assumed that westward flowing, or rather northwestward flowing, rivers emptied into it. This lake had already been visited by the English of New York, who through their alliance with the Iroquois laid claim to Ontario and Erie,¹⁶ and had sent canoes loaded with merchandise to cross these waters and trade with the Ottawas.

Several years after Clayton's letter was written we come to an interesting document, accompanied by a map showing how the geography of the western regions appeared to the English at the close of the century. Cadwallader Jones, a landowner who held a large strip of land near the source of the Rappahannock, recorded some interesting observations on a journey he made to the Blue Ridge. Combining his personal records with the knowledge he had acquired from a copy of Hennepin's book that chanced to fall into his hands, he was able to draw a fairly accurate map of the country in question.¹⁷ "From our Caucasian Mountains [Blue Ridge]," says Jones, "which is now to me well known [it] cannot rationally be above one hundred miles into this Louisiana country, as appears on my draught [map]; and by way of a company of gentlemen adventurers it might be perfected

to as much honour and more profit than that of the North-west Passage by Captain Zachary Gillam."

The map of Cadwallader Jones is a creditable piece of work considering the material at the author's disposal. The Appalachian Mountains are shown with several rivers, notably the Potomac and the James, rising in them, and near the sources of these streams are crosses to locate the spots where Jones and his party camped on their expedition. To the north are the southern shores of three lakes, Michigan, Huron and Erie, with rivers flowing into them. The directions for getting from the Potomac to Lake Erie are plainly marked, and distances are also given. West of the mountain range and apparently rising at its foot, is the Ohio River with this inscription: "Ohio River runs into the River Meschasipi which empties itself in 29 degrees into Pallatia Bay which by mistake is called Mexico B. by the father [Hennepin]. It [Mississippi] runs 800 leagues from the head of [Pallatia] which he proposes [as] a way to Japan and China."¹⁸

The idea of reaching the South Sea by crossing the Blue Ridge Mountains had by now disappeared. The geography of the western country, thanks to the French, was now familiar to the English, or at least well enough known to show the folly of any such expectation. In place of a desire to trade in silks with the Far East there now arose a wish to establish a settlement beyond the mountains that would cut off the French from their newly-acquired possessions in the Mississippi Valley.¹⁹ Governor Spotswood's expedition to the Blue Ridge in 1716, famous more for its conviviality than for its contributions to geographical science, was undertaken, not for the purpose of finding a route to the sea, but with the object of ascertaining the practicability of establishing communication with the Great Lakes in order to found a

settlement on Lake Erie connected by a chain of posts with the mountains, and to prevent the French from encroaching on the territory of the English Queen. In a letter to the Board of Trade, written August 14, 1718, the governor expresses regret that after a century of settlement no attempt had been made to find the sources of the Virginia rivers, and to learn what lay beyond the mountains. "The chief aim of my expedition over the great mountains in 1716," he says, "was to satisfy myself whether it was practicable to come at the lakes. Having on that occasion found an easy passage over that great ridge of mountains which before were judged impassable, I also discovered, by the relation of Indians who frequent those parts, that from the pass where I was it is but three days' march to a great nation of Indians living on a river which discharges itself in the Lake Erie; that from the western side of one of the small mountains, which I saw, that lake is very visible, and cannot, therefore, be above five days' march from the pass aforementioned, and that the way thither is also very practicable, the mountains to the westward of the great ridge being smaller than those passed on the eastern side, which shows how easy a matter it is to gain possession of those lakes." ²⁰

The explorations in Virginia interest us no further. The route to the Western Sea, with which we are solely concerned, was closed by the breadth of a mighty continent to ambitious Englishmen who ventured during the eighteenth century to cross the Appalachians. To attain the Pacific it would be necessary, as was now realised, to ascend some western tributary of the Mississippi, or else to venture out in search of a westward running stream in the wilds of northern Canada. For a story of the attempts to carry out this project we must turn back to the activities of the French Canadians.

CHAPTER VII

EFFORTS OF THE FRENCH TO SOLVE THE MYSTERY OF THE TRANS-MISSISSIPPI REGION

French in Louisiana.—Fictitious journey of Mathieu Sagean.—The story of Baron La Hontan.—Hennepin's opinion on western geography.—Founding of the colony of Louisiana.—The work of Iberville.—Journey of Saint-Denis to Texas.—Voyage of La Harpe.—Father Bobé studies the problem of western geography.—Cadillac's opinion on the subject.—Missouri River.—De Lisle's maps.—The six routes to the Western Sea drawn by Bobé.—Colonists urge discovery of the Western Sea.—Voyage of Moncacht-Apé.—Opinions of various cartographers.—Voyage of Father Charlevoix and his report.

THE story of French exploration west of the Mississippi River may be roughly divided into two sections: one comprising the attempts made from the colony of Louisiana, and the other embracing the expeditions sent out from Canada proper to the regions west of Lake Superior. The enterprises backed by the authorities in Louisiana, which will form the subject of this chapter, were not undertaken primarily for the purpose of finding a route to the Western Sea, but with the object of establishing trade relations with the Spanish settlements in New Mexico, and also of discovering those mines of precious metals which were reported to lie in the western country. The South Sea, whose location was well known, excited but little interest among the traders of the lower Mississippi. The object of discovering a passage to the South Sea had always been a commercial one, and those undertaking and financing expeditions organised for this purpose had ever before their eyes the profits and advantages of Oriental commerce; but now that the Missis-

issippi, the great waterway to that ocean, was found to end in the Gulf of Mexico, the lure of distant trade with Asia was supplanted by the more immediate advantages of commerce with Spanish neighbours. Moreover, the northern part of New Spain was supposed to abound in gold, silver and precious stones. The story of exploration in Louisiana, then, is more one of westward expansion than one of discoveries undertaken for the sake of acquiring geographical knowledge or finding a route to the Western Sea. On the other hand, in examining the records relating to western Canada, compiled during the first half of the eighteenth century, we find that the route to the Western Sea still remains the prime motive of exploration. In dealing with this latter field our course is comparatively easy, but in discussing the expeditions in Louisiana we shall be obliged to pick and choose, laying emphasis on those events that bear more directly on the subject of this book.

The reader will doubtless recall that in describing the efforts of the English to find the Northwest Passage we touched upon some curious apocryphal voyages through an imaginary strait from the Pacific to the Atlantic by way of the Arctic Ocean, and vice versa, notably those of Maldonado and Juan de Fuca. The universal desire to find such a passage created an opportunity which impostors were not slow in seizing; and so it was in the case of an overland route to the Western Sea, which was to be found by ascending some river flowing from the west into the Mississippi. The continual reports of such a river at whose headwaters might be found a stream flowing westward into the sea, which reports the French had been receiving from the Indians, made excellent material for those who hoped to mislead the public for the sake of gain or merely for love of a hoax. The two accounts we shall now examine are the work of impostors who entertained their fellow countrymen with their

stories of fictitious voyages to a western river leading to a communication with the Pacific.

Mathieu Sagean was a creole from the island of Montreal. According to his story, he accompanied La Salle down the Mississippi River and returned with him as far as the Illinois villages, where he remained with Tonty while La Salle went back to Montreal. Here Sagean determined to set out on a voyage of discovery on his own responsibility, so obtaining permission from his superior, Tonty, he took with him eleven Frenchmen and two savages and started to explore the upper Mississippi, following in the footsteps of Father Hennepin. After paddling up the river to a spot forty leagues above a falls (presumably that of St. Anthony at the site of modern Minneapolis) his party halted and encamped for about a month and a half. Here, while wandering about the country in the hope of making some discovery, they presently came to a river which ran in a southwesterly direction, and they at once concluded from this that it flowed to the South Sea. Sagean hastened back to camp, and, gathering together his companions, quickly made the portage to this promising stream, carrying his canoes through a country abounding in lions, tigers and leopards. He embarked on the river, and after travelling two hundred and fifty leagues he came to the country of the Acaanibas, a nation controlling two hundred leagues of territory. Their ruler, it was said, boasted of his descent from Montezuma. The country, as legendary countries are wont to do, abounded in gold; and the walls of the king's palace were built of gold and rose to a height of eighteen feet. Sagean, in order not to be misunderstood as to the quality of the metal that composed the walls, is careful to point out that the gold was not in the form of plates laid on a baser substance, but was formed of solid blocks held together by bars of the same material. "These people do a large business

in gold," says the account of the voyage, "but the said Sagean cannot say positively with what nation unless it be the Japanese, for they carry it away afar in caravans, so far that it takes six moons to make the journey from their homes to this nation."¹ Sagean spent some time with these people. He gives a full description of them, emphasising their wealth and the vast quantity of precious metal they used for the most ordinary purposes. On taking leave of the king, Sagean and his party were given as much gold as they could carry, but for various reasons they were unable to bring it to Canada with them. The rest of Sagean's adventures, as told in the account of his voyage, do not interest us, for they took place in parts of the world far remote from the Mississippi. Sagean finally landed at Brest in 1699.

Sagean's story does not seem to have been taken seriously in Canada, though it created some little flurry in France. A cross-examination of its author, conducted by order of the minister, Pontchartrain, disclosed but little that was not known from the narrative as he originally gave it. In answering questions regarding the whereabouts of the imaginary river and the characteristics of the legendary country he said he had visited, Sagean seemed to be fairly precise in his replies, but when quizzed about the names of the men who had accompanied him, his memory appears to have failed him. Strange to say, the matter did not end there. A sea captain named Belle-Isle, who was in Brest at this time, stated that while he was at Martinique he met a Canadian who gave him an account of a tribe of Indians whose king lived in a palace of gold in a location similar to the one described by Sagean. This Canadian claimed to have been of La Salle's party. The captain had forgotten the Canadian's name, and it is quite possible that the man may have been Sagean himself, for he was a great wanderer and

may very well have touched at Martinique in the course of his travels. The Minister of Marine, when these two accounts—Sagean's story and Belle-Isle's report—were presented to him, was greatly impressed, for he concluded that since the two narratives agreed on so many essential points they must be based on some actual facts, although they came from different sources. He therefore sent the Governor of Martinique instructions to keep watch for the Canadian and send him to San Domingo if he could be apprehended.²

As evidence of belief in Sagean's veracity we find references in one or two documents to the *New World* of the Dutch writer, de Laet, where is found the story of Juan d'Ognato, a Spaniard who led an expedition northward from Mexico to the country of the Canibas (Acaanibas?), where he found a great quantity of gold and silver. Sagean, it is pointed out, could not have been cognisant of this story, for he was not an educated man; but as his account has some similarity with the narrative found in de Laet, it must have been based on actual facts.³

In turning from these purely French speculations to the conclusions of the Canadian explorer, Pierre Le Sueur, we find a correct estimate of Sagean's story. La Sueur says that he knew the man in Canada under the name of Mermande, and that he had never heard of his being on the Mississippi. On inquiring, he learned from Tonty that Sagean had not been with La Salle on his journey to the sea, and consequently he could not have made the voyage from the Illinois up the Mississippi. Moreover, Le Sueur had himself explored the upper Mississippi and knew Sagean's descriptions to be false. In dismissing Sagean's claim to have found a great river leading in a southwesterly direction, Le Sueur says: "It might have been so if he [Sagean] had seen the Mississippi two hundred leagues above the spot where he says he went, for the savages of that country, who are the

Sioux, have told me several times that they had been on the warpath far beyond the sources of the Mississippi in the territories of peoples living on the banks of a great river, of which they knew neither the source nor the mouth.”⁴ Sagean’s story had no influence, so far as we can judge, on the men of his time, save for the extracts we have noted, for his mythical river does not appear on contemporary maps, nor do we hear anything further about him, though years later Father Charlevoix, who made a voyage down the Mississippi for the purpose of drawing up a survey of the country, made an attempt, when he was in Havana, to get into touch with Sagean.⁵ Whatever may have been Sagean’s merits as a fabricator, he was completely overshadowed by the brilliant Baron de La Hontan, his equal in mendacity and his superior in literary ability, whose travels, published in 1703, made considerable impression on serious-minded geographers.

Louis de La Hontan was born in 1666. From early childhood he had heard much of Canada and had become fascinated by the possibilities which it held forth to the bold and adventurous. At the age of seventeen he secured a commission that enabled him to go to New France with a detachment of marines. He took part in an expedition against the Iroquois shortly after his arrival and was afterwards sent to take command of a western fort. The enforced idleness he was obliged to endure at this post was so irksome to him that he seized the first opportunity to resign his command and to start on a voyage of discovery on his own responsibility. Setting out from Michilimackinac in September, 1688, he journeyed up Green Bay to the Fox River, and ascending it to the Fox-Wisconsin portage he reached the Mississippi. Here, turning northward, he presently came to a river—probably the Minnesota—flowing into the Mississippi from the west. At this point the baron

leaves the well-known regions of geographical fact and enters the realm of fancy, for it is on the shores of this stream, called by him the Long River (*Rivière Longue*), that his pretended journey, opening a communication with the Western Sea, was to take place. Launching his canoes on the Long River, he paddled up its waters for several days until he met the Eokoros Indians, who granted the party a hospitable reception. Passing from village to village, he soon came to the last of these settlements, where the chief informed him that sixty leagues farther up he would find the Essanapes, a nation with whom he (the chief) was then at war. On taking leave of the Eokoros, La Hontan was given six Essanape slaves to act as guides, and with these he proceeded up the river. In due course of time the travellers reached the Essanapes. Here La Hontan was told that farther up the river he would meet with the Gnacsitaires, a nation bound to the Essanapes by ties of friendship, and allied with them for the purpose of guarding against the turbulent Mozeemlek. The explorer determined to visit the first of these tribes and accordingly set forth at the earliest opportunity. His reception by the Gnacsitaires was at first unfavourable, for they mistook the French for Spaniards, a nation they regarded with disfavour. To satisfy themselves about their visitors they sent couriers to a tribe living eighty leagues to the southward, asking for some one who could identify the French, for this tribe was said to be located near the Spaniards of New Mexico, who, so the chief of the Gnacsitaires assured the French, were distant only two hundred and forty leagues. The savages on their arrival readily identified the French, or rather testified that they were not Spaniards, and from that time on La Hontan met with more cordial treatment. Four Mozeemlek Indians were brought to the French and interrogated by them. They gave a careful description of their country, while the

Gnacsitares contributed to the information by a map from which La Hontan copied the details on his own chart. According to this sketch the Long River rose in a ridge of hills on the other side of which was the river of the Mozeemlek nation. This latter stream flowed in a westerly direction. At a distance of one hundred and fifty leagues from the place where La Hontan was encamped, so the Mozeemlek said, this river of theirs emptied into a salt lake of three hundred leagues in circumference, the mouth of which—for it drained into the ocean—was about two leagues broad. The people dwelling upon this lake were called Tahuglauk, and from the general description given of them one would judge them to be Spaniards. For various reasons La Hontan felt unable to proceed any farther and he presently returned to the Mississippi. He continued his explorations, however, by descending this river and visiting some of its more important tributaries for a short distance. He was the first to ascend the Missouri, making his way upstream as far as the Osage.⁶

Despite the falseness of his story, La Hontan was widely believed, and, in truth, there was no reason why he should have been doubted. He had made a voyage to the Mississippi where, so he said, he found a river flowing into it from the west, which rose near the source of a stream emptying into a western sea. All this was quite in accord with what was expected, and indeed, with what actually exists, for the sources of the Missouri and the Columbia are close enough together to give a certain rough resemblance to La Hontan's fictitious streams. No doubt the explorer obtained the materials for his story from the accounts given him by Indians living on the banks of the Mississippi, for the configuration of the rivers, the mountain range to the west, and the salt lake, are to be found in various contemporary reports derived from the savages. La Hontan's book was published

in 1703, and appeared presently in three languages: French, English and German. Its style is brilliant, far more so than that of the average narrative by an explorer, and this, coupled with the fact that Europeans were ever fascinated by tales of adventure among the American Indians, led to its being widely read. The author also depicts Indian life as one of Arcadian simplicity, in which savages lived a care-free existence, untroubled by the artificialities of a more civilised society. All these factors: the plausibility of the story, the fascination of its literary style, and the general interest manifested in such subjects by Europeans, helped to fix the legend of the *Rivière Longue* on contemporary and later geography. We find it on the maps of numerous cartographers throughout the eighteenth century.

La Hontan's story had, then, considerable influence on subsequent maps and geographical descriptions. Daniel Coxe in his *Carolana* gives considerable space to the Mississippi Basin, and frankly acknowledges his indebtedness to La Hontan. He interlaces the headwaters of the Missouri with those of the Long River, both of which, he believes, form a connection with a westward flowing stream. In speaking of the Missouri, he says: "When you are up this river sixty or seventy miles, you meet with two branches. The lesser, though large, proceeds from the south, and most of the rivers that compose it fall from the mountains, which separate this country from New Mexico; notwithstanding which, there is a very easy communication between them. This is called the river of the Azages, from a numerous people, who have sixteen or eighteen towns seated there-upon, especially near its mixing with the Yellow [Missouri] River. The other, which is the main branch, comes from the northwest, most of whose branches descend likewise from the mountains of New Mexico, and divers other large provinces which are to the north of New Mexico, wholly

possessed by the Indians, who are said to be very numerous, and well policed. . . . The most northerly branches of this river are interwoven with other branches, which have a contrary course, proceeding to the west, and empty themselves into a vast lake, whose waters by means of another great river [Columbia] disembogue into the South Sea. The Indians affirm they see great ships sailing in that lake, twenty times bigger than their canoes.”⁷

Thus far Coxe is fairly accurate, remarkably so when we consider the paucity of correct information at his disposal. The Osage River is hardly the one a traveller would take to reach New Mexico; the Kansas River a little farther up the Missouri, would answer the purpose better, since it was later used as the first stage of the Santa Fé trail. The interlocking of the sources of the Missouri with a westward flowing river is true to actual conditions, but Coxe, like so many of his contemporaries, permits a great lake to intervene between the Rocky Mountains and the sea. Coxe was misled in his statement regarding the lake by a report he heard from a man “well skilled in geography,” who told him of having found a river on the Pacific Coast which entered a great lake. Continuing, Coxe takes up the description of La Hontan’s Long River. “Forty leagues higher [i.e., above the Wisconsin], on the same side [of the Mississippi],⁸ is the fair large river Mitchaoywa [Minnesota], which is the same the Baron La Hontan calls the Long River, and gives a very particular description thereof, having navigated it almost to its heads. It has a course of above five hundred miles, and the southern rivers, of which it is composed, are near the northern heads of the river of the Messourites, both taking their original from the mountains which divide this country from that which leads to the South Sea. Several rivers proceed from the other side of the mountains, which are easily passed in less than one day, and fall into the same

lake above mentioned, which discharges itself by a great river into the aforesaid sea.”

An interesting opinion on western geography at this time is that of Father Louis Hennepin. The friar still retained the belief that America and Asia were joined together near the Arctic Circle, a theory which he is careful to note on his map of 1683 by showing an inlet in the Pacific coastline in the proper location for the Strait of Anian and marked: “The pretended Straits of Anian.” This configuration is fully explained in the text of his book, *A New Discovery of a Vast Country*, in which he submits evidence showing that the strait is imaginary. His conclusions in this matter result from a misunderstanding of the great width of the American Continent, but at least he denies the existence of any great lake in the west, a belief which was so misleading to many geographers.⁹ “During my stay amongst the Issati and Nadoussians [Sioux], there arrived four savages in embassy to these people. They had come above five hundred leagues from the west; and told us by the interpreters of the Issati, that they were four moons upon the way: for so it is they call their months. They added, that their country was to the west, and that we lay to the east in respect of them; that they had marched the whole time without resting, except to sleep, or kill game for their subsistence. They assured us there was no such thing as the Straits of Anian; and that in their whole journey they had neither met with, nor passed over any great lake; by which phrase they always mean the sea, nor any arm of it. They farther informed us, that the nation of the Asseni-poulacs [Assiniboines], whose lake is down in the map [Lake Winnipeg], and who lie northeast of the Issati, was not above six or seven days’ journey from us: that none of the nations within their knowledge, who lie west and northwest of them, had any great lake about their countries, which were very large, but only

rivers, which coming from the north, run across the countries of their neighbouring nations, which border on their confines on the side of the Great Lake, which in the language of the savages is the same as the sea.”¹⁰

There is much in this statement that is true, though Hennepin failed to put the correct interpretation on it. He did not realise that the continent was wide enough to make it possible for the Indians to traverse a distance of five hundred leagues on American territory west of the Mississippi. Failure of the Indians to cross the sea or any branch thereof was not due to the absence of a channel between the two continents, but to the great width of North America. Hennepin's idea on this subject was his own, and it does not appear to have been shared by others. By the time the colony in Louisiana was founded the following facts, or rather, compositions of facts and theories, were generally accepted. The trans-Mississippi country was vast in extent; there were several rivers coming from the west, notably the Missouri and the Long, and flowing into the Mississippi; these rivers rose in a mountain range situated far to the west; from these mountains were rivers flowing westward into the sea, or into a great lake connected with the sea. The problem which confronted the explorers was to trace one of these branches of the Mississippi to its source and find a passage over the mountains to the ocean. How valuable such a route would be from a commercial point of view is a question on which the French were undecided. As the South Sea receded from the eastern seaboard, the government became more and more sceptical of a route to it ever being of any importance in business dealings with the Far East, and consequently left the financial burden of exploration to be shouldered by private individuals who felt interested in the solution of the geographical problem.

The end of the War of the League of Augsburg in 1697

ushered in an aggressive policy on the part of England towards the French colonies, which in turn led France to fear for the safety of her American possessions. "There is grave danger," reasons a prominent French Canadian who favoured the colonisation of Louisiana, "that if France does not seize this part of America, which is the most beautiful, in order to have a colony strong enough to resist that of England which she now has in the eastern part of Pescadoué [Piscataqua] as far as Carolina, the English colony which is becoming very large will increase in such a way that in less than one hundred years it will be strong enough to seize all America and drive out all the other nations."¹¹ Danger from English aggression was by no means imaginary. The British colonists along the Atlantic seaboard had by this time reached the divide on the Appalachian Mountains and were preparing to explore the headwaters of the rivers flowing into the Mississippi. They were well acquainted with the profitable fur trade carried on by the Canadians, and were looking for an opportunity to obtain a portion of it for themselves. William Penn, so it was said, had sent a party of men to the head of the Wabash River, an action which, it must be admitted, was a dangerous intrusion on French territory. Furthermore, a society was being organised in London under the leadership of Daniel Coxe for the purpose of extending English possessions by colonising the mouth of the Mississippi.¹² These reports were no mere rumours or idle threats; the English were actually making preparations, and they were soon to be on the ground with expeditions by sea to the Gulf of Mexico and by land to the Illinois region. In addition to a desire to anticipate the English in Louisiana, those favouring the settlement of that territory pointed out that Canada, because of her rigorous climate, could not be entirely self-supporting and needed the addition of a milder climate that would supply her with products which she was

unable to produce. A commerce of this nature between the two colonies would also facilitate the fur trade, and a settlement along the Mississippi would enable the French to get into touch with the Indians who came down there every year from the north, whereas at this time the savages traded principally with the English at Hudson Bay. Louisiana, so wrote a promoter, was rich in beaver, timber, lead, copper and many other valuable commodities.

The treaty of Ryswick closing the War of the League of Augsburg gave the government sufficient leisure to undertake colonial enterprises, and the King from this time on consented to a reversal of his former policy of concentrating the colonists in eastern Canadian settlements. The arguments in favour of a colony in Louisiana now bore fruit, and the government began preparations for the enterprise. A distinguished Canadian, Le Moyne d'Iberville, who had for some time been urging the advisability of such a step, was given command of two vessels and commissioned to select a suitable location at the mouth of the Mississippi, where he could erect a fort, for the first object of the expedition was to hold the mouth of the river against other nations.

Iberville sailed in October, 1698, and reached the Gulf of Mexico the following year. He cruised along the coast westward from Pensacola, examining it carefully for a trace of La Salle's river, for the exact location of the Mississippi Delta was at that time unknown. Arriving at Biloxi, near Mobile Bay, he left his ships and, taking a detachment with him, started off in canoes. The discovery of the river was now a simple matter, for Iberville in cruising along the coast had no difficulty in finding a mouth of the stream and ascending the channel for a short distance; but to identify his find with the Mississippi of La Salle was quite another matter. Fortunately he met a tribe of Indians who presented him with a paper which they said some white men

had left with them many years before. This paper proved on examination to be a letter for La Salle left with the savages by Tonty, and the contents of the letter showed clearly enough that the river on which Iberville was sailing was the Mississippi. Satisfied with his discovery, Iberville returned to Biloxi, where he erected a fort, and, leaving a small garrison under his brother, Bienville, to guard it, he returned to France in May.

The results of Iberville's initial expedition were considered sufficiently gratifying to warrant his continuing the work of colonisation the following year. The King in his instructions for the management of the second expedition requested information on the nature of the country, the sort of produce that could be grown there, and the kind of goods of French manufacture which the colonists of such a place would be able to consume. The King also showed an interest in the possibility of growing mulberry trees in the new possessions for the purpose of introducing the art of sericulture, and he ordered an investigation of the matter; but the principal object of the scheme was to ascertain the location of mines, as the government was certain of the presence of minerals of the same nature as those of Mexico, since the two countries lay in the same latitude.¹⁸ Nothing was said about a route to the Western Sea in this document, an omission which shows the government's complete apathy on the subject. Iberville left France in October and reached Biloxi in January, 1700. He started at once for the Mississippi and, arriving there, learned from Bienville that an English vessel had been in the river ready to take possession of the country. Realising the danger of foreign aggression, Iberville erected a fort about eighteen leagues above the river's mouth; but ill health prevented his taking part in any further activities, so he retired to Biloxi, leaving his brother,

Bienville, to assume the work of discovery. Iberville returned to France in May.

Iberville himself, whatever were the opinions of those who had sent him, was interested in a route to the Western Sea. This much we know, for on his naval expedition to Hudson Bay some years before he had found papers at Fort Nelson which gave him hopes of finding his way to the sea by these northern waters. But whether he believed it possible to find a route through Louisiana, or considered such a route practical if it were found, it is not easy to say. On the whole, Iberville appears to have held a somewhat pessimistic opinion of the country which he had been instrumental in colonising. "The only use one will ever get from this discovery," he is reported to have said, "will be to perfect geography which is very imperfect on our globes." The country west of the Mississippi, he wrote, was entirely unknown, and in order to get some value for the money expended on colonisation it would be necessary to send out *coureurs de bois* as far as the strait that separates California, or what we know as the Peninsula of Lower California, from the mainland, and to send with them men versed in cartography and in the taking of observations. Iberville had a comprehensive plan for the exploration of the western portion of the province. "I shall take proper measures," he writes, "for the discovery which it is advisable to make by the River Marne [Red River] or the Arkansas or the Missouri, if it is considered necessary. These will be measures which must be taken on the spot by people who have come down from the Illinois and the Sioux and who have a knowledge of the country. My belief is that it is best to go by the river Marne, leaving the Missouri, if this is thought to be the best and shortest route. We must know how we should act among the savage nations who are at war with the Span-

iards; whether we should influence them towards peace or allow them to go on [fighting] until the Spaniards request us to act. On finding ourselves near New Mexico to know if we should go there or send someone to find out what the country is like. On finding the height of land and the rivers which flow down to the Western Sea, to know if we should descend them if they flow into California near the settlements, and to know if it is safe to place ourselves in the hands of the Spaniards or into those of the savages subject to them. On finding the sea, which is reported, to know if we should explore it or if we should leave settlers there among the nations to learn their language and exact information about the country.”¹⁴ Meanwhile Bienville, who had been left in Louisiana when his brother returned to France, undertook a short voyage up the Red River. After great hardships, he succeeded in reaching the villages of the Natchitoches situated some little distance up this stream. Nothing was accomplished by this journey save the acquisition of a little knowledge regarding the nature of the country traversed.

The outbreak of the War of the Spanish Succession in 1701 distracted the attention of the home government from Louisiana for a period of ten years, during which time little effort was made to nourish the colony, and it was obliged to shift for itself as best it could. With the advent of peace the King, freed from military anxieties, was able to pause in his foreign affairs long enough to turn his province over to a wealthy merchant named Antoine Crozat. Such a move was probably the best that could be devised under the circumstances, for government finances after the disastrous war were in no condition to bear the expenses of an overseas undertaking of this nature. By placing the business in the hands of a private individual the colony would be developed (if it could be developed at all) without expense to

the King. The patent issued to Crozat on September 14, 1712, rehearses the events leading up to the granting of the charter, and outlines the system of government under which the colony was to operate. The document relates almost entirely to questions of commerce and mining, nothing being said about exploration, still less about so vague a thing as a route to the Western Sea. Crozat appointed La Mothe-Cadillac as his representative on the spot, giving him a commission to act as governor of the colony. In the instructions which he received Cadillac was urged to give his attention to two things in particular: the finding of a route to New Mexico, whereby trade could be carried on with the Spaniards, and the discovery of mines, for Crozat as a man of affairs was interested solely in the development of the economic resources of his acquisition, and had no intention of spending good money on expeditions that promised no return save the gratification of idle geographical curiosity. Cadillac himself, during his period of incumbency, manifested no desire to push forward the work of finding the Western Sea, though he held an opinion, based on observations made while commander at Michilimackinac, that this sea could be reached by ascending the St. Pierre or Minnesota River.

Expeditions dispatched westward from Louisiana during the first half of the eighteenth century were undertaken principally for three purposes: discovery of routes to Mexico where silver mines were to be found; discovery of the mountain range believed to be a continuation of that of New Spain and which was supposed to contain minerals; and the opening of trade with the Spaniards. In attacking the problem of discovery it was but natural that such expeditions as were sent towards Mexico should first be directed by the Red and Arkansas Rivers as those streams were the nearest at hand. The Missouri was, of course, well known, but it

was generally supposed to lead away from the Spanish settlements, that is, in a westerly instead of in a southwesterly direction, and although there were many reports of the mines to be found along its tributaries, the great desire to trade with Mexico impelled the explorers to seek the nearest route to that country. Father Le Maire, a missionary familiar with the country, sounded a note of warning to those who wished to reach Mexico by this river. "The Missouri," he says, "has been ascended more than four hundred leagues without any Spanish settlement being encountered, and it is only at five hundred leagues that one begins to get news of the Spaniards from the savages who make war on them. They, in this country, regard what is read in Baron La Hontan of this western part of Louisiana as stories made to entertain, and one must wait until it is more peopled with French to be able to explore what we know of this country." ¹⁵

When France ceded Acadia to England by the treaty of Utrecht in 1713, the loss of this province caused the French government to consider its new acquisition of Louisiana more seriously than it had done before, and to take steps to strengthen its hold on the province and to resist the possible encroachments of the English, who were keenly alive to the possibility of splitting the French possessions by driving a wedge between the colonial establishments of Canada and Louisiana. The first steps in this process were taken by the establishment of posts in the territory and by dispatching expeditions to link up the commerce of Louisiana with that of Mexico. La Mothe-Cadillac, soon after his arrival, was approached by colonists who suggested an exploration of the Red River. The governor saw at once the possibility of reaching the gold and silver mines which were reported to lie in the western part of his province or in Mexico by such a step, and readily acceded to the suggestion. He selected a

young officer named Juchereau de Saint-Denis to lead the expedition. Saint-Denis left Dauphine Island, at the entrance to Mobile Bay, in August, 1714, with four of his fellow countrymen, and proceeded up the Mississippi River to the Red, which he entered and ascended to the settlement of the Natchitoches. Here he left the river and struck out in a westerly direction, crossing the Trinity and Colorado Rivers, and came finally to the *praesidio* of San Juan Bautista on the Rio Grande River near its junction with the Conchos. The authorities received him hospitably and sent him to the viceroy of Mexico, who entertained him and requested him to take charge of nine missionaries who were going to various Indian tribes situated along the route he was to take on his return journey. Saint-Denis acceded to the request and, taking the missionaries with him, made his way home in a leisurely fashion, stopping at various towns and settlements along the road. He reached Dauphine Island in August, 1716. Saint-Denis's expedition established a road to the Spanish colonies in New Mexico, but beyond this it accomplished nothing in the way of discovery.

Shortly after the return of Saint-Denis a change of government took place in the colony. Crozat, realising his inability to make a success of the venture, surrendered his right to Louisiana, and the Crown turned it over to the Company of the West. The new proprietors were ambitious, especially to acquire wealth in the speediest manner possible. Reports of mines in New Mexico led to their organising expeditions to explore the West in search of precious metals. The Spaniards, however, occupied Texas, thereby putting an end to French expansion in that quarter, but there was a vast, untouched, even unknown region, drained by the waters of the Arkansas, Missouri and Platte Rivers, where the French could disport themselves at will. The company, in addition to its desire to locate mines, wished to link up commerce with

the Spaniards, and this could only be done by continuing the work begun by Saint-Denis. Governor Bienville, the successor of La Mothe-Cadillac, in order to accomplish this, selected an officer named Bénard de La Harpe, whom he ordered to go to the tribes situated beyond the Natchitoches, where he would have ample opportunity of getting in touch with the Spaniards for the purpose of opening trade; and he was furthermore instructed to spare no effort in making discoveries in the western part of Louisiana. La Harpe had arrived in Louisiana in 1718 accompanied by a group of followers which he had brought with him to settle a concession he had obtained on the Red River. On reaching the colony, he found no accommodations for his people, and he was about to abandon the project in despair when Bienville, recognising him as a man of capacity, persuaded him to remain and attempt the exploration of the Red River. La Harpe agreed to undertake an expedition. At Bienville's suggestion he set himself to found a post on the upper waters of the Red, among the Nassonites and Cadodaquious, of which he was to be the commander, and by using this as a base he hoped to communicate with the nearest Spanish settlements for the purpose of establishing commerce with Mexico. In addition to this he was to discover the sources of the Red River.¹⁶

La Harpe left New Orleans in December, 1718. He entered the Red River the following January, but met with such high waters and strong currents that it took him a month to reach the Natchitoches. On arriving at the villages of these Indians he learned that the Spanish governor of Texas was about to establish a post among the Nassonites, a tribe situated farther to the west. Hurrying forward to forestall this move, he soon reached this nation and started to build his fort on the banks of the Red River. His overtures to the Spaniards were not well received; on the contrary, they led

to an exchange of notes setting forth the rival claims of the French and Spanish sovereigns to the territory where La Harpe was about to establish himself. Meanwhile news came to him of the declaration of war between Spain and France. Realising the impossibility of entering into friendly relations with the Mexican officials under the circumstances, he decided to improve his time by visiting the Toucaras on the Canadian River. On returning to the Nassonites he found a letter awaiting him in which the Council of Louisiana congratulated him on his discoveries and urged him to treat well such Spaniards as he might meet, for it was hoped to induce them to enter into commercial relations despite the war. But the Spaniards were gathering troops and it became advisable to return to New Orleans.

Shortly after his return La Harpe made a voyage by sea to St. Bernard Bay on the coast of Texas, a place where he hoped to found a permanent settlement. His enthusiasm for the project was dampened, however, by orders from the company prohibiting any continuation of such an enterprise; and the company further ordered the Council of the Colony to maintain the posts along the tributaries of the Mississippi instead of establishing a settlement in Texas. On the strength of this La Harpe was ordered to complete the exploration of the Arkansas, along which, so it was said, the Spaniards were beginning to gain a foothold. The purpose of an expedition in this direction was far removed from any desire to discover a route to the Western Sea; it was motivated solely by the wish to found a post for the protection of the establishments of the country west of the Mississippi and to obtain from New Mexico animals which were needed in the French colony. La Harpe's voyage did little more than extend the knowledge of the geography of the Arkansas River and the western regions along its banks. His enthusiasm for the Arkansas River, which he believed to be navi-

gable as far as the Spanish settlements, was not shared by the Council. This body felt that it would be better to solidify the French possessions along the Mississippi than to extend them, or even to venture, so far west. La Harpe, discouraged by this apparent lack of sympathy for his schemes, presently returned to France.

While the voyages dispatched to the west by the company were innocent of any desire to learn about the country for the sake of geographical knowledge and were actuated only by motives of commerce, there were still persons in France who kept up a keen interest in the geography of Louisiana and felt the desirability of gaining access to the Pacific Ocean. Father Bobé, a Jesuit missionary, was at this time in France. He had made a comprehensive study of North American geography for the special purpose of familiarising himself with all possible avenues to the Western Sea. Not only did he read all printed matter on the subject, but he gained access to many unpublished memoirs and questioned every one who had any knowledge of the western territory. He was among the first to see through La Hontan's story of the Long River. In an interview with Raudot, minister in charge of the colony under Pontchartrain, he pointed out on a map he had just received from the geographer, Guillaume de Lisle, the possibility of reaching the Pacific by an overland route. "M. Raudot admits that it is easy and advantageous to discover the Western Sea," he wrote to de Lisle. "I press him strongly to have the discovery made. If you have any light and any memoirs touching that [western] coast, I beg you to let me have them. I will use them so as to please you, and if you have anything else I beg you to let me know of it."¹⁷ Later he wrote de Lisle urging him to erase from his maps the river La Hontan claimed to have found, for all Canadians, and even the governor of Canada, whom he had questioned, told him that the river

was unknown. Then, plunging into his favourite topic of the Western Sea, he says: "They tell me that among the Sioux, up the Mississippi, there are always Frenchmen trading; that the course of the Mississippi is from north to west, and from west to south; that it is known that towards the source of the Mississippi there is, in the highlands, a river that leads to the Western Ocean; that the Indians say that they have seen bearded men, with caps, who gather gold dust on the seashore, but that it is very far from their country to that, and that they pass through many nations unknown to the French. I have a memoir from M. de La Mothe-Cadillac, former governor of Missilimackinac, who says that if the St. Peter's [Minnesota] River is ascended to its source, they will according to all appearance, find in the highlands another river leading to the Western Ocean. For the last two years I torment exceedingly the Governor General, M. Raudot, and M. Duché, to induce them to discover this ocean." ¹⁸

Cadillac, from whom Bobé had obtained some of his ideas regarding the Western Sea, had gathered, while at Michilimackinac, information regarding a great river whose course, he says, is known for a thousand leagues—an obvious exaggeration—and which flows from the west into the Mississippi. By ascending this stream one could discover the Western Sea, "for," as he writes, "experience shows to those who travel in that country that all rivers take their source in some lake situated on a mountain or height of land on a divide which has two slopes. This forms almost always two or more rivers, which one sees readily in Acadia where one of the rivers falls into the sea on the south side and the other on the north side." The point is further illustrated by such examples as the divide separating the Ottawa River from Lake Nipissing. This, he falsely assumes, is a watershed between the Atlantic and the South Sea, for he

traces the course of the waters from Lake Nipissing to Lake Huron and Lake Michigan, the latter draining, according to his opinion, into the Mississippi and then flowing into the South Sea. Therefore, he reasons, "there is nothing easier than to have communication between the two seas [i.e., Atlantic and Pacific] by lakes and rivers in traversing the depth of land as far as twelve or fifteen hundred leagues; and in taking the river of St. Pierre [Minnesota], which joins that of Mississippi, whose source is to the southwest at 48 degrees of latitude and 276 of longitude, and which passes to the Sioux, one can follow it by going to the west as far as 1000 leagues, so that if the river of St. Pierre, as large and beautiful as the Mississippi, takes its source in some lake situated on an elevation of land which has two slopes, it is evident that this other river must fall into the Western Sea, and it is difficult to see that it could be into the North Sea." But it is precisely with the North Sea, or better with Hudson Bay, that communication is to be had by the Minnesota River, for this stream issues from Big Stone Lake situated at no great distance from the Mississippi, and from Big Stone Lake a short portage can be made to Lake Traverse the source of the Red River of the North which flows into Lake Winnipeg, a lake emptying its waters into Hudson Bay by the Nelson River. It is of course possible to reach the west from Lake Winnipeg by means of its affluent the Saskatchewan River, and the Indians may well have had just such a route in view when they pointed to the St. Pierre as a trail to the Western Sea. Winnipeg, says Cadillac, forms many rivers flowing into Hudson Bay, and it is called by the Indians the grandfather of all the lakes because of its great size. "The Assiniboels [Assiniboinés]," he goes on to say, "report that having crossed by lakes and rivers during a hundred days' journey, going towards the setting sun, one finds the salt sea,

after which they say that there is no more land. This being so, it could be nothing else than the Western Sea.”¹⁹

Father Bobé felt at this time that the confused ideas of the Western Ocean which had been current among French geographers were beginning to clear. He was in correspondence with the missionary, Father Le Maire, who sent him letters from Louisiana giving the latest available information regarding western geography. Le Maire also produced maps which he sent to France. Bobé on receipt of these charts, and also of an important memoir dealing with their subject matter, showed the same to a number of people interested in the question, and wrote to de Lisle that he would forward the maps to him. The French, Indians and Spaniards, said Bobé, were all fairly well agreed on the general lay of the land and the course to be taken to reach the Western Sea. “If the Court will say the words,” he wrote de Lisle, “we can in a short time know the facts of the matter. The Academy [of Sciences] should engage an intelligent man to go to that fine country and make observations which would give a good knowledge of it.”

A few years after writing this letter Bobé drew up an elaborate treatise on the geography of western America in which he outlined a number of possible routes to the Western Sea. But before discussing his memoir it is necessary to glance at the Missouri River, as it now begins to play a more important part in the geographical speculations regarding the principal arteries leading to the Pacific.

Marquette, and later La Salle, had noticed the Missouri on their voyages down the Mississippi, and had stopped long enough to inquire of the neighbouring Indians the possibility of reaching the South Sea by this stream. The information thus obtained was promising enough for them to make note of it for future reference. La Salle, in fact, went so far as

to say that the Missouri was, perhaps, the main branch of the stream which he was exploring, that is the Missouri and the lower part of the Mississippi were, taken together, the great river, while the upper Mississippi was but a tributary. This opinion was also held by one de Remonville, who in describing the muddy appearance of the great river below its junction with the Missouri says in a letter: "I conclude from this that as the Marne becomes the Seine, after their waters have for a long time disputed the ground at Charenton, the Mississippi could well give way to the Missouri which is a river of considerable size, and whose extent we shall not know for several years. On it there are fourteen different nations, with large populations, and among which I shall find if I ever go there, ample matter for your entertainment."²⁰ There were also other reasons for the importance of the Missouri as a thoroughfare to the west. Claude de Lisle, father of the royal geographer, Guillaume, and himself a geographer, stated in a memoir to the King (1702) that while the Red River and the Arkansas might lead to New Mexico, the Missouri was the more likely route to the Western Sea. This, be it understood, was before the first expedition to New Mexico, namely, that of Saint-Denis, had set out.

La Hontan's Long River had focused popular attention on a more northerly route, but now a few investigators began to see through the imposture and to realise the value of the Missouri in the search for the Pacific, though the influence of La Hontan was felt by European cartographers down to the middle of the eighteenth century, despite the warnings they received from those whose personal observations had made them familiar with the country. Scarcely had Iberville established his colony on the banks of the Mississippi when attempts were made to learn something of the Missouri. But even so the Canadians anticipated the colonists of Louisiana, for Bienville as early as 1704 speaks of them as

dwelling on the Missouri as well as on the Wabash and Mississippi.²¹ The following year there arrived travellers from the Illinois country, one of whom had been on the Missouri where he gathered some rather confused ideas of the tribes along its banks and the Spanish posts on the New Mexican frontier. Bienville learned from a group of Canadians, who had come down the Mississippi, of the excellent copper mines to be found on the Missouri, and some of these travellers who had been on the river spoke of it as a waterway to the Spanish settlements. The lure of precious metals was quite as potent in drawing explorers up the Missouri as any desire to reach the Western Sea, which latter motive, it must be admitted, was now prompted more by scientific curiosity than by the possibilities of Asiatic trade. Nicolas de La Salle²² in writing of the mineral resources of the country says: "Having failed to inform you²³ by my preceding letters of the knowledge I have of the Missouri River, I give myself the honour to write you to inform you that it is very important to make the discovery of this stream. I know positively by slaves of the nations along the river that I have questioned, that there are pieces which they call iron of the same colour and quality as the piasters in which they see that we are interested; and that white men like ourselves, who are no other than Spaniards go very frequently with mules in this country, which makes us conjecture that they cart nothing else than the product of this mine. This river falls into the Mississippi about five hundred leagues from the Gulf of Mexico. There are Canadian travellers who have ascended it nearly three or four hundred leagues towards the northwest and the west in the most beautiful country of the world, without being able to learn where its source is located."²⁴ The Missouri, then, if this statement is not a gross exaggeration, was known for a considerable distance above its mouth, not by the vague reports of savages, but by

the actual explorations of Frenchmen; and this was as early as 1708.

Trade on the Missouri soon grew in popularity, and the importance of the river as a route to the Western Sea, an avenue to the mines, and a trail to New Mexico was more and more emphasised. An anonymous description of Louisiana written in 1715 shows the presence of *coureurs de bois* on the banks of this stream, and Father Le Maire assures us of the location of gold mines which could be reached by it, since, according to the stories of the western tribes, Spanish caravans crossed the river near its source to seek among the Indians of the mountains their supply of gold. A current French publication describes the river as coming from a great mountain on the other side of which a stream flowed into a large lake that can be no other than the sea of Japan.

Father Le Maire advocated the Missouri as the proper route to the Western Sea on the ground that a more northerly one would involve the traveller in a network of bays and gulfs and among frozen regions, where it would be impracticable, if not impossible, for him to make headway. It would be easier by far to ascend a river, cross a mountain, and slide down the other side to the ocean. The Sieur Hubert, a colonist, sent a proposal to the Council of Marine embodying suggestions, worked out in considerable detail, for organising an expedition to explore the river. The principal object of this plan was mining, and in order to carry this out successfully it would be necessary to have a company of fifty soldiers who would also act as workmen, twelve Canadians to handle the Indians, twelve men to manage the boats, and forty negroes to act as rowers. Such a company would also be sufficient to hold the Spaniards at bay on the upper Missouri. In addition to the mining venture Hubert displayed a commendable interest in exploration. "This project," he says, "which is very easy to execute and which it

seems should not be put off lest we are forestalled, has another side that is no less magnificent. This is a great river which is believed to issue from the same mountain where the source of the Missouri is located. It is even believed that a branch of it falls into the Western Sea. The Canadians taken on this expedition would soon make this discovery; and by the establishment of a post, which would bring trade from China and Japan, the route would be shortened.”²⁵

Interest in the discovery of a route to the sea was growing rapidly in France among government officials despite the indifference with which such a project was regarded by the company. In fact the company being primarily a money-making enterprise, subordinated all other activities to this the principal one, and it was not long before it concluded to withdraw its more scattered posts and concentrate the settlements for purposes of economy. This policy appears to have discouraged exploration. Yet in France scientific ambition was still alive. The royal geographer, de Lisle, whose interest we have seen expressed in his correspondence with Father Bobé, had presented to Pontchartrain as early as 1700 a memoir in which he rehearsed all the evidence he had been able to gather regarding the existence of the Western Sea, which he here distinguishes from the South Sea, together with his own conclusions on the subject. Later, in 1717, he presented the Court with a memoir of like import containing additional evidence. In the first document he writes to Pontchartrain: “The King having testified by letters patent given to M. de La Salle May 12, 1678 that he had at heart the discovery of the western part of his country of New France, I thought that I would do something agreeable to his Majesty if I showed that there is a sea in these regions and that one may hope to go by this route to the great South Sea, which would open to the French a new path to China and Japan, which is a thing that has been looked for for some

time.”²⁶ De Lisle then attempted to prove the existence of a huge sea to the northeast of New Mexico washing the shores of Quivira at approximately the fortieth parallel. He based his opinion for this location of the Western Sea on a statement of the Spaniard, Gomara, who traced the course of the explorer, Coronado, in a northeasterly direction to Quivira, where, he said, the Spaniards saw the sea. This discovery was kept something of a secret by the Spaniards, but the English learned about the location of a sea in this region from some unknown source, and de Lisle offers as evidence of this knowledge (somewhat naïvely, it is true) the voyage of Dermer up Long Island Sound to Hell Gate where the explorer proposed to seek for a passage to the Western Sea, as we have explained in a previous chapter. To this fantastical bit of evidence de Lisle adds the account found in the *Jesuit Relations* of the unknown Englishman who had made his way up the Kennebec River to Canada in search of a route to the Northern Ocean by which he proposed to reach the Western Sea. He also gives in his memoir numerous references to certain passages in the *Relations*, with which we are already familiar, showing the information that the Fathers had gathered regarding the great geographical puzzle.

De Lisle also quoted Pierre Le Sueur, a man who had spent many years on the upper Mississippi, as saying that the Sioux had gone fifteen days' journey westward in order to make war, and found in the countries where they went forts, located on a seashore, in which there were people dressed like the French. An inland sea or lake, according to Le Sueur, was to be found in the country of the Pawnees, and from this lake there issues a large river flowing to the west, though the location of its mouth is unknown. This probably is the river of which Marquette speaks, and the sea cannot be far off. De Lisle tells also of a map which was sent him by a Canadian commander, named Louvigny, who drew it

according to the information given him by men who had followed La Salle to the gulf. This chart shows a river which goes towards the settlements of the Spaniards where it falls into the sea. But, says de Lisle, it should not be said that this river flows into the sea of California, as many are apt to think it does, for California must be nearly four hundred leagues beyond it, and it is easy to see that the Indians were not referring to the Sea of California or South Sea when they spoke of the ocean into which the river flows. The confusion is due to the failure to examine the reports carefully with a view to checking them up with the known distances. There must be a sea in this general locality, reasons de Lisle, for although the French have learned of it only through the savages, it seems impossible that so many people in so many places at so many different times have united to make up a falsehood. Having satisfied himself as to the existence of a vast salt water body in the heart of the North American Continent west of the Mississippi, de Lisle proceeds to enumerate the manifold advantages that would accrue to the French from its discovery; for, he reasons with considerable force of logic, the presence of great ships which the Indians report to have seen there indicates access to the South Sea, and such a connection would open up an avenue of communication with the Far East. The strait between the two seas he places at forty-three degrees north latitude.

Graphic illustrations of de Lisle's conception of a western ocean are not wanting, for numerous maps exist showing how he succeeded in reconciling the reports of the great salt water body west of the Mississippi. In J. N. de Lisle's *Explication de la Carte des Nouvelles Découvertes etc.* 1752, we find a copy of one of Guillaume de Lisle's sketches made early in the eighteenth century showing an immense gulf extending far inland and connected with the Pacific Ocean by a narrow channel. It has, however, no connection with a northern

sea as Dablon believed it would have. Another map in this book, called *Carte d'une Partie de l'Amerique Septentrionale*, shows the Western Sea extending east to the Mississippi and south to the fortieth parallel. It shows its author's indebtedness to the Indians by the inscription: *Mer de l'Ouest, pas encore decouverte, mais autorisée par le rapport de plusieurs sauvages qui assurent y avoir été*; and further, the sea is said to be navigable to the north of New Mexico and Quivira. We give as illustration of this idea of the Western Sea, henceforth to be distinguished from the South Sea or Pacific Ocean, as a separate body of water, the *Carte Generale* of J. N. de Lisle. It is interesting to note on this map the author's belief that the supposed sea was the one into which de Fuca had sailed under the impression that he had entered the Atlantic, though this interpretation of de Fuca's voyage was by no means unanimously shared by de Lisle's contemporaries. Martin d'Aguilar's discovery of a great river on the coast of California is here set down as another entrance to the Western Sea. It was this Western Sea, then, that became the object of so many speculations and voyages of discovery during the eighteenth century.

The opinion of such a distinguished geographer as Guillaume de Lisle carried great weight among men of science and French officials, and this opinion was now reinforced by Father Bobé who, shortly after de Lisle had presented his second memorial, appeared with a document in which he unfolded an elaborate plan for reaching the Western Sea, a plan based upon a thorough and mature study of all available information. According to Bobé the French, English and Spaniards had for a long time spoken of this sea, though it had not been discovered, and in his opinion its exact location was as yet unknown. It would be a fairly simple matter, he says, to find this sea, which cannot be more than two hundred leagues from the headwaters of the Missouri and Mis-



J. N. DE LISLE. *Carte Générale des Découvertes de l'Amiral de Font* 1752.

issippi, by ascending these rivers to their sources, which are situated on a height of land where streams will be found flowing westward to *Cap Blanc*. In proving the existence and location of this sea Bobé does not rely on the accounts which the Indians gave the French when the latter arrived in the Mississippi Valley, for the sea would have been found ere this, he thought, if it were no farther away than these reports had placed it. The Indians, in telling of the Western Ocean, must have confused it with Hudson Bay or the Gulf of Mexico. Relying on the opinion of Father Le Maire who had lived in Louisiana for twelve years Bobé denies the story of La Hontan and his Long River, so long an incubus on the minds of explorers and geographers, by saying that his river and salt lake flow into the Gulf of California and not into the Western Sea. This gulf, says Bobé, may also be reached by taking the southern fork of the Missouri to its source near the Colorado River. In order to form a correct idea of the topographical conditions, he reasons, one must provisionally accept the conclusions of Hennepin, Cadillac and Le Maire. In addition to these authorities there must also be taken into account the information gathered by Pierre Le Sueur and Noel Jeremie, the latter for years the commander of Fort Bourbon at Port Nelson. With these two men we shall deal more fully later.

Hennepin, Bobé points out, told of meeting savages who had come more than five hundred leagues from the west and had met with no strait on their journey. Cadillac described the St. Pierre River as one thousand leagues in length—an estimate which Bobé upon subsequent investigation reduced to eighty—and rising in a lake near which may be found a river flowing to the ocean. Bobé places great stress on the account of Jeremie, who had obtained his information from Sioux prisoners brought him by the Assiniboines. These savages told of a nation dwelling to the west of their

territory which had for neighbours bearded men living in stone fortifications and who, so Bobé thought, could be no other than Spaniards. Bobé, besides drawing from these sources, had kept up a correspondence for four years with the Sieur Turpin, a resident at Le Sueur's fort on the St. Pierre. As a result of his cogitations he formed a conception of western geography that has some special features differing from those of his contemporaries. The western coast, he believed, ran due north to *Cap Blanc* on the forty-third parallel where it changed to a northwesterly direction and continued to a passage which he called Uriez Strait in latitude 70° . The country between *Cap Blanc* and Uriez he called *La Bourbonnie*. Uriez led northward into a great sea, called the Gulf of Amour, and beyond Uriez was the Strait of Anian separating America from northern Japan. Furthermore, Bobé believed in the existence of a strait leading from the northwestern part of Hudson Bay to a northern sea above *La Bourbonnie* which, though it did not separate that territory from the American Continent, was linked to the Pacific by the Strait of Anian. As evidence of the close proximity of America to Asia towards the north he suggests a strong resemblance found between the American Indians and the Tartar and Hebrew stocks of Asia. To the question of distances he gives estimates placing the Japanese coast in longitude 169° , *Cap Blanc* in 250° , and the Mississippi on the 275th meridian, thus, allowing twelve leagues to a degree, he shows the distance from the Mississippi to the western coast to be about three hundred leagues.²⁷

In Bobé's memoir we find six routes which he has traced from the Mississippi or eastern Canada to the Western Sea. The first lies up the Mississippi to its source, where one finds, according to the savages and Jeremie, a great river flowing westward into the sea, probably at *Cap Blanc*. This route, unfortunately, does not conform with actual facts, and

the misconception is due to Bobé's ignorance of the whereabouts of the source of the Mississippi. At this point it will be well to describe the outline given on a map published by Samuel Engel in 1765, for, although it was designed long after Bobé's memoir was written, it gives an excellent picture of the western rivers as Bobé conceived them to be.²⁸ Above the Falls of St. Anthony on this sketch the Mississippi takes a sharp turn to the west and extends a long distance in that direction to its source in a range of mountains. Running parallel to this portion of the great river is the Long River (here given in place of the Minnesota), for Engel, like many eighteenth century cartographers, was by no means willing to brand La Hontan's story as false; on the contrary he expresses in his descriptions of the country considerable confidence in this loquacious explorer. The sources of the two rivers are not far apart. West of the mountains we find the river to the Western Sea, the one La Hontan heard about from the Mozeemleks, and this flows through the lake of the Tahuglauks. All this tallies well with La Hontan. South of the Long River is the Missouri running parallel to it, while a second western river, called the Grand Tiquaio, gives another means of access to the Pacific that may be utilised by those ascending either the Long River or the Missouri. The strange distortion of the Mississippi into a river rising in the far west, a mistake that was not made in seventeenth century charts, is due to the erroneous impression derived from the Indians that the Pacific could be reached from its headwaters.

Bobé's second route lies up the Missouri to a point where the river mentioned by the Sieur Turpin will be found flowing westward into a large lake, whence another stream leads to the sea near *Cap Blanc*. A shorter route to the lake may be found by ascending the St. Pierre. For the third route Bobé suggests that several rivers will be found between the

Missouri and New Mexico, running westward into the ocean between the thirty-seventh and forty-fourth parallels. The fourth route like the second begins by ascending the Missouri to a point where a river will be found entering it from the south, and at the source of this stream easy access can be had to the Colorado which flows into a branch of the Gulf of California. This is the route which the Indians spoke about to Marquette and Joliet when the latter reached the mouth of the Missouri on their journey down the Mississippi. The river coming in from the south and debouching into the Missouri is evidently the Platte.

The fifth route is spoken of as the easiest and perhaps the shortest of the group. It begins on Lake Superior and takes the traveller up the Kaministikwia River by a series of lakes and streams to Rainy Lake where, according to Jeremie, the *Rivière du Cerf* can be found leading to a portage across which is a river flowing to *Cap Blanc*. This route is recommended by Bobé because it offers only three portages: one at Niagara Falls, the second at a point between the Kaministikwia and Rainy Lake, and the third between the *Rivière du Cerf* and the River of the West. The sixth and last route is vague and uncertain; even Bobé recommends it for none but Indians, owing to the vast and unknown wilderness which it is said to traverse. It starts from the country of the Assiniboines, northwest of Lake Superior, and leads westward overland through beautiful prairies. After journeying for several hundred leagues the traveller would come to rivers flowing from the region north of *La Bourbonnie*, and by these he would reach the sea south of that country.

Many references have been made to a lake, usually one of salt water, into which the River of the West flowed on its way to the sea. This legend is found in various sources, notably the story of *La Hontan*, where it seems to have taken the form in which it is most frequently found on maps.

Guillaume de Lisle on his *Carte du Canada*, 1703, despite his predilection for a vast western sea, appears to have omitted it and to have copied directly from La Hontan. Though on the whole he is somewhat suspicious of La Hontan's veracity, he reproduces the baron's Long River with great precision and detail, and even goes to the trouble of inserting an inscription telling the source of his information. He shows beyond the mountains a river flowing into a long, narrow, salt water lake opening into the South Sea, with the inscription: "Lake of salt water, thirty leagues in length and thirty in circumference,"²⁹ according to the reports of the savages who say that its mouth is far off to the south and is not more than two leagues wide, and that there are about one hundred villages around this sort of sea on which large vessels sail." The entire scheme is taken from La Hontan. Passing on to de Vaugondy's *Amerique Septentrionale*, 1750, we find this same lake, but here it does not open into the sea, on the contrary it is completely landlocked and placed far from the coast. It drains into the Pacific, however, by a long river, called *Grande Rivière coulante à l'Ouest*, which, running due west, empties into the ocean at the forty-seventh parallel by the entrance ascribed to Juan de Fuca. A little to the south of this is found another stream, the Belle Rivière, leading from the headwaters of the Missouri to a bay which Martin d'Aguiar was believed to have entered. These and other charts show the general conception of western geography as based on French sources. Save for a tendency to bend the upper Mississippi westward, and the continuous and exasperating reappearance of La Hontan's river, the maps show a very creditable picture of the Far West, when we consider the almost total lack of definite information which handicapped their authors.

The map-makers of this period seem to have had two separate ways of reconciling the reports of western geogra-

phy, as they received them from the Indians, with the details of the Pacific Coast which they learned from Spanish sources. On one hand, as for instance on the de Lisle map we have reproduced (not the one mentioned in the foregoing paragraph), there was the belief that the passages discovered by Juan de Fuca and Martin d'Aguilar were entrances to a gulf known as the *Mer de l'Ouest*; on the other the opinion that they were openings for large rivers which came from the mountain range dividing the continent, that is, the River of the West and the *Belle Rivière*. These two distinct conceptions appear on the eighteenth century maps and seem to have exerted an equal influence on current geography.

For several years during the time when Bobé was compiling his memoir, a large number of communications were sent from Louisiana to the home government urging that expeditions be dispatched in search of the Western Sea, for the settlement of this burning question was one of great moment for the colonists. The company, of course, would do nothing. It was interested only in money-making and had neither the time nor the funds for undertakings of this nature. In the interest of trade with the Spaniards and of friendly relations with the western Indians the company did send out an expedition under Venyard de Bourgmont, a young Canadian ensign who had lived for some time as a *coureur de bois* on the Missouri, but his instructions make no mention of a route to the sea. His experience and his knowledge of the Missouri would have made him a suitable leader for a voyage of this nature had the company been sufficiently interested in it. A colonist of Louisiana, still believing in the old legend of the presence of Asiatics on the coast, suggested a voyage be made by Bourgmont, which he believed could be brought to a successful conclusion by distributing two thousand *livres* worth of presents among the savages, and this would enable Bourgmont to explore four or five hundred leagues above

the Indian villages and establish commerce with a numerous nation of men of small stature who were said to have large eyes separated from the nose by an inch space. These men, so the story ran, were clothed like Europeans, always shod, carried spurs and plates of gold on their shoes, and were well lodged around a great lake, distant from the Pawnees (?) about six hundred leagues, and were constantly engaged in artistic work. Obviously they must be Chinese.³⁰ Bourgmont was, indeed, sent forward, but not for the purpose suggested by the settler. He ascended the Missouri and Kansas Rivers in 1723-4 for some distance and succeeded in establishing friendly relations with the Indians he encountered on the way.

At this point it will be well to acquaint the reader with the curious narrative, gathered by a colonist, of a voyage across the continent to the Western Sea which the colonist said was made by an Indian about the year 1700, and which he claimed to have heard from the Indian's own lips. The story at first appears to be a strange one and rather challenges our credulity, but when it is stripped of certain features which have the earmarks of embellishment, the essential points stand out in a way that suggest a strong element of probability, particularly when we take into consideration the length of time consumed by the savage on the journey and the ease and speed with which an Indian was able to travel. The story is told by Le Page du Pratz, a Frenchman who came to Louisiana in the fall of 1718, as one of those sent over by the company, and settled at Natchez where he became interested in the Indians of the neighbourhood and especially in tribes who came originally from the northwest, of which there were several living in the vicinity. Du Pratz found among the Yazoos an Indian chief, named Moncacht-Apé, from whom he gleaned the following account of the adventures which befell this savage when he journeyed to the

northwest in the hope of learning something of his ancestors. This story first appeared in a contribution of du Pratz to the *Journal Economique*, and took its first permanent form in Dumont's *Mémoires* in 1753. Three years later du Pratz embodied it in his *Histoire de la Louisiane*, giving a fuller account than Dumont.

Moncacht-Apé, according to his own story, left his home on the Mississippi and ascended the Missouri to the nation of the Kansas, where he paused to inquire the road to the west. The natives readily gave him instructions for proceeding to his destination, and told him that he should continue up the river for about a month's journey when it would be necessary for him to bear to the right, going directly north until he came, after several days' travel, to another river which ran from east to west, that is in the direction opposite to the current of the Missouri. Following this stream he would eventually come to the nation of the Otters where he could rest himself, and, perhaps, find some one to accompany him on the next stage of his journey. The Indian followed his instructions carefully and came to the westward flowing stream which he called the Beautiful River. By this he presently reached the Otters who received him hospitably, and gave him to understand from their remarks that the sea was not far off. On this sea there came from time to time ships bearing men of a different race, and, says Moncacht-Apé, "it is necessary always to be on the watch against the bearded men, who do all that they can to carry away young persons, for they never have taken any men, although they could have done so. They [the Indians] told me that these men were white, that they had long, black beards which fell upon their breasts, that they appeared to be short and thick, with large heads, which they covered with cloth; that they wore their clothes, even in the hottest weather; that their coats fell to the middle of their legs,

which, as well as the feet were covered with red or yellow cloth. For the rest they did not know of what their clothing was made, because they had never been able to kill one, their arms making a great noise and a great flame; that they nevertheless retire when they see more red men than their own numbers; that then they go aboard their pirogue [without doubt a barque] where there were sometimes thirty and even more. They added that these strangers came from where the sun sets to seek upon this coast a yellow and bad-smelling wood which dyes a beautiful yellow.”³¹

As du Pratz thought the Beautiful River mentioned by Moncacht-Apé might flow into the Western Sea, since the Indian described it to him as discharging into a great water, he determined to question him on the subject. Moncacht-Apé rehearsed for du Pratz's benefit his course up the Missouri and down the Beautiful River, again emphasising the northerly and westerly direction of his route; then he told du Pratz of the skirmish between the Indians and the bearded men which he himself had witnessed, and he described it in such a manner as to leave no doubt that the strangers were either Europeans or Asiatics. “After this,” continued the savage, “I thought only of continuing my journey. To accomplish this, leaving the red men to return to their homes, I joined those who lived further to the west on the coast, and we travelled always following at a short distance the coastline of the Great Water, which goes directly between north and west. When I reached the homes of this people I rested several days, during which I studied the way that remained for me to travel. I observed that the days were much longer than with us, and the nights very short. I wanted to know from them the reason, but they could not tell me. The old men advised me that it would be useless to undertake to go further. They said the coast still extended for a great distance to the north and west; that finally

it turned short to the west, and finally it was cut through by the Great Water directly from north and south. One of them added that when young he had known a very old man who had seen this land [before the ocean had eaten its way through it] which went a long distance, and that when the Great Waters were lowered [at low tide] there were rocks which showed where this land was. Every one turned me aside from undertaking this journey, because they assured me that the country was sterile and cold and consequently without inhabitants, and they counselled me to return to my own country."

Du Pratz believed the Indian's story fully; and indeed there is no reason why he should have doubted it, for the adventure is quite within the bounds of probability. He may have enlarged on it somewhat, as we find by an examination of Dumont's account of Moncacht-Apé's voyage—an account which Dumont admits having obtained from du Pratz—that it gives a rather modified version of the journey, though the main points are substantially the same. Dumont is less abundant in his detail of the Indian's itinerary, and he substitutes for the story of Moncacht-Apé's skirmish with the strangers a statement telling us that the Indian gathered his knowledge of these people, and of the sea over which they came, from a squaw who was captured by the tribe he met on the Beautiful River. Moncacht-Apé himself, according to Dumont, never reached the sea but learned about it from hearsay. The story of Moncacht-Apé had some influence on contemporary cartography. Du Pratz made a careful computation of the distance traversed by the savage, basing his calculations on the time he took to reach the mouth of the Beautiful River and the probable number of leagues he travelled per day; then by making a generous allowance for the detours which such a journey necessarily involved, he reached the conclusion that the distance from the Mississippi,

at the point where the Indian started, to the mouth of the Beautiful River was about nineteen hundred leagues.

At this time geographers were unable to realise the vast extent of the North American Continent in the latitude of the Great Lakes. As explorers ventured up the Missouri they were astounded at the distance which the territory extended to the westward, and since the explorations of Father Kino in northern Mexico in 1700 had proved that California was not an island, as was generally supposed in the seventeenth century, the cartographers felt obliged to devise some theory by which the distance between the Mississippi at its source and the Pacific could be diminished to conform with the many reports of the Western Sea they had received from the Indians, which indicated the coast to be in closer proximity than it would be if it extended due north in prolongation of the western shoreline of the Peninsula of Lower California. Prior to Kino's discovery the supposed insularity of California had enabled geographers to assume that the western coast of the continent sloped in a northeasterly direction towards the Great Lakes. But now the situation was changed. Hence the geographers attempted to solve the problem of the great width of the continent, which was now beginning to come to their notice, thanks to exploration and, perhaps, to the story of Moncacht-Apé, by accepting the theory of the Western Sea as a gulf in the Pacific as expounded by de Lisle. This plan may be found on Janvier's *Amerique Septentrionale*, 1762, where it is shown as a tentative solution of the question, but there is no hesitation on the part of Philippe Buache who boldly inserts it in his *Carte Physique*, 1754.

Du Pratz, however, knew that Moncacht-Apé's story could not be made to harmonise with this geographical speculation, hence he rejects the Western Sea with a suggestion that it is nothing more than a name for the northern part

of the well-known Pacific Ocean. "The good sense which I know was possessed by this man who had not, and could not have had a reason for deceiving me," he says in referring to Moncacht-Apé, "causes me to believe all he told me; and I cannot persuade myself otherwise than that he went to the shores of the South Sea of which the northern part may be called, if one wishes, the Western Sea. The Beautiful River which he descended is a river of considerable size, and it will not be difficult to find it once one gets to the sources of the Missouri; and I do not doubt that such an expedition, if undertaken, would entirely clarify our ideas on this part of North America and on the famous Western Sea of which so much is said in Louisiana, and of which the discovery, it appears, is so much desired." ³²

There were several geographers who followed du Pratz in his rejection of the Western Sea theory in favour of the account of Moncacht-Apé. Samuel Engel on his map shows a curious interpretation of the Indian's narrative. He draws the Missouri, for only a short distance from a range of mountains, due east to the Mississippi; it is entirely devoid of a northerly trend. The Beautiful River rises just across these mountains and flows an enormous distance to the river draining La Hontan's Lake of the Tehuglauks, which in turn empties into the sea. North of the mouth of this latter river is a small stream which, according to Engel, marks the northernmost point of the Indian's wanderings for it bears the inscription: "Here appears to be the end of Moncacht-Apé's voyage." A similar interpretation of the story is found on Robert de Vaugondy's *Amerique Septentrionale*, ³³ where we see the Beautiful River flowing into the sea south of La Hontan's westward flowing river. In other respects the two charts show much the same conception. Identified with actual geographical facts as they are known to-day, the Beautiful River is probably the Columbia, for this is the only

stream of any importance that could fulfil the requirements of the story. It may be reached by going in a northwesterly direction from the headwaters of the Missouri.

Failure of the government officials to push forward at this time to the sea was due to the fact that they were awaiting the return of a missionary whom they had sent to travel in Canada and Louisiana for the purpose of gathering at first hand all the necessary data for such an undertaking. Father Charlevoix was the individual chosen for this work and a fortunate choice it was for the man himself as well as for his superiors, as it gave him the opportunity to obtain much valuable material for the compilation of his excellent history of Canada, a work which was considered the best authority on the subject before the time of Parkman. Charlevoix was sent out under the orders of the Count of Toulouse to whom he reported the results of his observations. He was provided with a letter of introduction to the governor of Canada, Vaudreuil, and the intendant, Begon, ordering these two officials to provide proper facilities to the bearer in the work he was to undertake. "The King, gentlemen," reads the letter, "has charged Father de Charlevoix, who will hand you this letter, with the discovery of the sea of the west, and it is the intention of his Majesty that you allow him to carry into the upper country, with two canoes and eight voyageurs, the goods which they will bring and in which they will trade. This will serve to reimburse the expenses they will incur on this voyage."⁸⁴

Charlevoix landed at Quebec in September, 1720, and spent the winter in the city, for the season was too far advanced to permit the undertaking of any voyage westward. He improved his enforced idleness by questioning every trader who returned to Quebec, and he also went to Three Rivers and Montreal to learn what he could at these settlements. "But all my researches," he says, "had no great suc-

cess, as the Canadian travellers take no great trouble to instruct themselves on the country they traverse. It is even necessary to be somewhat on guard against them; for as they are sometimes ashamed not to be able to give an account of what they have seen they make no scruples of substituting fictions which they digest well enough in place of the truth which they do not know.”³⁵

The following year the Father reached Michilimackinac. He was particularly desirous of interviewing Lieutenant La Nouë, who had built a fort on the Kaministikwia River just north of Lake Superior, and whom he supposed would be able to give him the latest information. La Nouë, unfortunately, had already left for Montreal, but Charlevoix hastening after him overtook him and obtained confirmation of what he had already heard regarding the west. This was merely that beyond a nation called the Brochet there was a certain tribe situated not far from the sea. Such elementary information was scarcely worth the trouble he took to get it, as it left him no wiser than before, though it gave him the satisfaction of knowing that he was on the right track. On returning to Michilimackinac he had the good fortune to meet Father Marest, a missionary to the Sioux, and other travellers who were able to supply him with much valuable news. Charlevoix was now beginning to feel the necessity of establishing a mission among the Sioux in order to build up a friendly feeling between those savages and the French, for he realised that the road to the west lay through their country. His opinion of the veracity of the Canadian *voyageur* was not a high one, and after he had interviewed a number of these gentry who had been on the Missouri, he expressed the same distrust of them that he had felt for those he met in eastern Canada.

It is not our purpose to trace Charlevoix's voyage down the Mississippi and back to France, as we are interested only

in the results of his survey; moreover, he was merely reconnoitring the ground and was not engaged in actual exploration. His report to the Count of Toulouse, drawn up after his return to France, is an excellent piece of work owing to the care which the author took not to be misled by stray rumours, but to subject all he heard to careful checks, and to write down only the mature conclusions which he had reached after a critical analysis of his material. His report, therefore, embodies the most accurate information of the day. Charlevoix divided his evidence of the location of the Western Sea under four headings. There is nothing new in this evidence, nor is there anything that gives a different impression of the west than we have seen in other documents, yet it has the value of having been carefully sifted, and it may be regarded in the light of authentic information as distinguished from the wild rumours that were continually in circulation on the frontier.

I. "It appears certain," begins Charlevoix, "that from 40° north latitude, and even from a more southerly point, to 50° the lands of the west end at the sea, which is sometimes nearer Louisiana and sometimes farther away. Two Pawnee slaves, questioned separately, have assured me of having been there after a three months' march, for their entire village was fleeing before a hostile tribe. It [the sea] was towards the equinox, and the country which these savages left was situated at about 43° , and their route was always towards the setting sun. The sea will be found to the west and south of the Lake of the Assiniboels [Winnipeg] which, as far as one can judge, is near 50° . It is scarcely possible to doubt that the Sioux have the sea on their western side. On this subject there is a unanimous sentiment among a great number of savages. All those who have heard tell about the country of the Assiniboels have been surprised to learn that the air is much more temperate than in Canada, although it is

much farther north. Does not this denote the neighbourhood of the sea? II. There is no occasion to doubt that west of the Sioux there are some savages. Some say they are Illinois, others Miamis, but this variety of opinion does not prejudice the truth. These two nations have probably the same customs, and their languages have much in common with each other. The tradition of the Illinois in Canada is that these western Illinois or Miamis are near the sea. III. Most of those who have known of the Western Sea have seen Europeans there or have found traces of them; I have been assured that two priests have appeared at the Lake of the Assiniboels. The Indians speak of two kinds of Frenchmen. These savages call French all those who are not of their colour, some white, well made and resembling us in everything, the others black, hairy and wearing long beards. Some add that these two different peoples make war on each other. IV. Many savages, i.e., Miamis, Illinois, Sioux, Missourites and others, assure us that at the height of land of the Mississippi, the Missouri and the Saint-Pierre one finds rivers that flow to the west; the best guides and the ones from which we shall get the most reliable information are the Aïouez [Iowas] and the Sioux. These two nations have commerce with each other, and a missionary among the Sioux as soon as he is in a position to make himself understood, can in a very little while be instructed in everything that we wish to know, besides we do not lack Sioux and Miami interpreters, and with these two languages one can go everywhere."

This summary of the routes to the Western Sea has in it a certain amount of truth. By ascending the Missouri and its tributary, the Platte, one would come to a height of land, the Rocky Mountains, on the other side of which is the Snake River leading to the Columbia and eventually to the sea. In a general way this is the route known in the nine-

teenth century as the Oregon Trail. Charlevoix fell into the popular error, however, of assuming that the Mississippi in its northern part, and also the St. Pierre River, extended due west to their sources in the Rocky Mountains. This misconception of the St. Pierre was due to Baron La Hontan's fable, while the error about the Mississippi is chargeable probably to a confusion on the part of the Indians who knew of an easy access from the source of the Mississippi to the Red River and Lake Winnipeg, whence one could go west by means of the Saskatchewan; or, perhaps, they were thinking, when they spoke of the sea, of Hudson Bay, the body of salt water into which Lake Winnipeg drains.

Charlevoix on reaching New Orleans had hoped to re-ascend the Mississippi to Michilimackinac, where he could get in touch with the Sioux in the expectation that some of them might be induced to take him to the Western Sea. This scheme proved impractical and he was perforce obliged to return to France. After collating his material he outlined two possible routes to the sea in a letter to the Secretary of State. "As soon as I reached Paris," he says, "I had the honour to render to his serene Highness Monseigneur the Count of Toulouse, reports that I had gathered on the Western Sea, and in accordance with the order he had given me I told him that I saw only two practical routes to discover this sea: that the first was to ascend the Missouri whose source is certainly not far from the sea; all the savages I had seen having unanimously assured me of it: that the second was to establish a mission with the Sioux, who are at war with the Assiniboels—and one cannot doubt that they make prisoners—and have commerce with the Aïouez [Iowas], situated near the Missouri with whose upper waters they are acquainted. Thus the missionaries will have by these savages, whose language they will soon learn, all the information they wish. It is to this last scheme that H.R.H. Monseigneur the

Duke of Orleans [the Regent] has held, and we have been told to detail two Jesuits for the new mission of the Sioux.”³⁶

The second plan appeared to the government the more feasible of the two. The King determined not to undertake, for the present at any rate, to discover the Western Sea; but he resolved to establish two missionaries among the Sioux who could, by the information they gathered, throw further light on the obscure geography of the west, and thus the government would be able to continue the search or abandon it, whichever plan seemed the more advisable. Charlevoix was agreeable to the suggestion as he admitted the difficulties of immediately pushing westward to the Pacific. There were, however, obstacles in the way of selecting suitable persons to undertake this mission, and so far no one had volunteered for the post. The recent hostility of the Sioux towards the French may have been the cause for this lack of enthusiasm. Charlevoix was willing to go and establish a mission, though he excused himself from taking charge of it on the ground of his age. Once it was established, he said, it could be handed over to another, while he would continue his work of exploration.

The story of the part played by the colony of Louisiana in the efforts to discover an overland route to the Pacific is comparatively insignificant. The colony under the management of Crozat, and later of the Company of the West, or India Company, was an enterprise undertaken for profit, and there was little time and less money to spend on schemes that had for their object the increase of geographical knowledge rather than the making of money. This statement is not made by way of disparagement, for the obstacles encountered by colonising companies in North America are too well known to call for any comment. Expenses were invariably heavy, and returns usually small. In Louisiana the situation was particularly vexatious, for as soon as the India Company took

charge of its affairs the colony became involved in John Law's famous Mississippi Bubble. Expeditions sent out from New Orleans, therefore, had for their object the opening of the country for purposes of expansion, and the discovery of a route to New Mexico by which trade could be carried on with the Spaniards. It was for the government, then, to take the initiative in promoting expeditions of a scientific character; and the government, as we have seen, felt, after reading the report of its representative Charlevoix, that the work of discovery was one to be carried out by instalments rather than by making an energetic drive to the sea. The route by the Missouri was now discarded in favour of the plan of establishing missions among the Sioux, and we must, therefore, turn to the regions about Lake Superior and the upper Mississippi to trace the next step taken by the French to solve the mystery of the Western Sea.

CHAPTER VIII

WESTWARD FROM LAKE SUPERIOR

Coueurs de bois.—Greysolon du Lhut.—English on Hudson Bay; their struggle with the French.—Nicolas de Jeremie collects geographical information.—Voyage of Jacques de Noyon.—Council of Marine takes up the question of exploration.—Regent decides to create posts.—Robutel de La Nouë sent toward Lake Winnipeg.—La Perrière settles on the upper Mississippi.—La Verendrye goes to Lake Nipigon.—He hears of the route to the Western Sea from an Indian.—Enlists the interest of Governor Beauharnois.—Government approves of La Verendrye's scheme of discovery.—La Verendrye builds forts on route from Superior to Winnipeg.—His many vicissitudes.—Father Aulneau.—La Verendrye loyally aided by Beauharnois.—La Verendrye reaches the Missouri from Lake Winnipeg.—Returns with belief that he has discovered the westward flowing river.—Dispatches his son who discovers the Rocky Mountains.—His work unappreciated.—His death.—Saint-Pierre takes up his work.—De Niverville sends an expedition up the Saskatchewan.

THE work of exploration in northern Canada during the eighteenth century was carried on in much the same manner as it had been during the seventeenth. The French continued the task of finding the Western Sea by pushing overland, while the English renewed their attempts to solve the mystery of the Northwest Passage by reviving their activities in Hudson Bay where they had left off in the reign of Charles I. The present chapter will deal solely with the French ventures.

We have had occasion from time to time to speak of a group of semi-outlawed fur traders known as *coueurs de bois*, and as their activities had considerable influence on geographical discovery in the west it is necessary to describe

their status at this time. These men were in the habit of carrying on their illicit commerce to the despair of the French government, for their business was not only injurious to legitimate trade, but it had a deleterious effect on the settlements by depriving them of a large number of inhabitants at a time when an increase of population was essential to their welfare. Fear of the Iroquois first kept the fur traders in the neighbourhood of fortified posts, but as soon as these savages had been defeated by the military operations of 1666, and a truce had been patched up with them, the more adventurous traders took to the woods. Leaders of the *coureurs de bois* were frequently gentlemen or persons of some position in the colony, and among them we find many officers of the Carignan Salières regiment, a regiment which had played an important part in the campaign of 1666. The adventurous business of the fur trade appealed more to men of this type than did the pastoral occupation of agriculture. As a rule such persons did not become *coureurs* but contented themselves with furnishing the merchandise used in bartering for furs, while the *coureurs* divided the profits of the enterprise with their patrons. This method of conducting business was undoubtedly profitable, for there were continual complaints of the large number of men who deserted the colony to engage in it. By the year 1680 the *coureurs* numbered about eight hundred, a large quota for a small colony to furnish for such a traffic. Fields were left uncultivated for want of farm labourers; families lost sons who departed for the Indian outposts where they drifted into the semi-savage life of the frontiersman; and what was particularly exasperating to the legitimate trade, the *coureurs* frequently prevailed upon the savages to exchange their furs for liquor, thus preventing the goods from reaching the trading posts. So great did the abuse become that important officials were accused by the intendant, Duscheneau, of profiting by it.

Early in the game the *coureurs* were able to spread themselves through the West, thanks to the posts which La Salle and du Lhut had erected in the Illinois country and on the shores of Lake Superior and Lake Nipigon. Ordinances were therefore passed forbidding this illegal traffic, but it was impossible to make laws too severe, as the *coureurs* in this case could easily divert the trade to the English colonies. A system of *congés* was then introduced to limit the number of those who could engage in the fur business, by which twenty-five canoes with three men each were sent each year to trade with the savages. This, however, did not help matters greatly, for the colony still suffered from lack of farm hands. The King made still a further attempt to check the evils of a dwindling agricultural population by suppressing the *congés* altogether in 1696; but this policy had the unfortunate effect of driving the *coureurs* from the colony altogether, so that when an amnesty was granted them in 1714, the greater number of these men were lost to Canada.¹ Yet whatever injurious effect the *coureurs* may have had on the economic life of the colony, the presence in the West of several hundred young men travelling to and fro across unknown territories led to a gradual accumulation of geographical knowledge which acted as a stimulant to discovery, and also proved an aid to those who undertook the work of exploration.

Among the leaders of the *coureurs de bois* was Greysolon du Lhut, whom we have already met as the rescuer of Father Hennepin on the banks of the upper Mississippi. Du Lhut, it will be remembered, had intended to go to the Western Sea with the aid of the Sioux, but when he saw the indignities which these savages had inflicted on Hennepin he decided that it would be impossible for him to deal any longer with men who failed in the respect due a French subject, and so abandoned his project. Yet he was not discouraged, nor

did he give up the idea of discovery. Shortly after his return from his voyage to the Mississippi he sailed for France where he entered into communication with the Marquis de Seignelay, son of Colbert, and requested from him permission to establish a post among the Sioux as a base of supply for his intended expedition. Pointing out the proximity of the Western Sea to the countries already known—for the savages had brought him salt purporting to come from this ocean—he says in his petition: “The said du Lhut, desiring to continue his discovery, humbly begs your Highness to obtain permission from the King to establish a post in the country of the Sioux, who seeing an establishment will give him all the necessary help to make his discovery of the shores of the Western Sea, called the Vermilion Sea, under the restriction of not being able to trade in beaver directly or indirectly with the savages who bring theirs to the French settlements and to forfeit the said permission if the governor, the intendant or the colonists of New France see that it is not advantageous to freedom of commerce.”² In case he is successful and posts are founded at the King’s expense, du Lhut demands seigneurial rights over them.

Du Lhut readily obtained his permit, and armed with it he returned to Canada and proceeded to Michilimackinac with a supply of goods to be used in trading with the Sioux. Here he learned of the policy which the Indians had developed of carrying their goods northward to Hudson Bay where they could trade with the English. This traffic he was bound to stop, so hastening to the northern shore of Lake Superior he pushed his way along it past his former station at the mouth of the Kaministiquia River, and ascending a stream beyond it, entered Lake Nipigon where he established a fort which he called La Tourette. Here du Lhut maintained a friendly intercourse with the northern Indians, drawing them away from the English and securing their

trade for the French. They promised to come to his fort in the spring; and he on his part proposed to erect a post in their territory which, he said, would enable him to check English trade entirely. Unfortunately he was not properly backed by the governor, La Barre. For one thing the raids conducted by Le Moyne d'Iberville on the English establishments at Hudson Bay deflected official attention from Lake Superior, but perhaps the principal reason for the lack of sympathy shown for du Lhut's project may be found in a letter written by the King to La Barre lamenting the prospect of a possible war with the Iroquois, a prospective calamity which he blames largely on du Lhut because the latter had executed two Iroquois braves for the murder of two French traders on Lake Superior. Besides, the voyages of du Lhut, in the King's opinion, could do no good to the colony and were permitted only to gratify the acquisitive instincts of a few individuals. So far they had done more harm than good.³ Du Lhut's project of discovery, therefore, died a natural death. The explorer does not seem to have attempted another journey to the west. Perhaps further intercourse with the northern Indians may have led him to revise his opinion concerning the proximity of the Western Sea, but more likely a lack of sympathy on the part of the government caused him to fail in securing the necessary backing for such an undertaking. His death in 1710 took place before the treaty of Utrecht had ushered in a period of peace during which interest in discovery was revived in official circles.

As we have had occasion to mention the presence of the English on Hudson Bay and the friction that arose between them and the French over the Indian fur trade, it will be well to sketch the events leading to the seizure of the bay by the British, and of their alleged encroachments upon French territory. Prince Rupert, cousin of Charles II, had become interested in the possibilities of fur trade in Canada

by the representations of the *Sieur des Groseilliers*, a man we have already met as the explorer of the northern Mississippi and Lake Superior. Under *Rupert's* patronage *Groseilliers* was dispatched in a vessel commanded by Captain *Gillam*. He left England in June, 1668, and after a cruise of over three months reached James Bay where he anchored at the mouth of a stream which he named the *Rupert River* in honour of his patron. Here *Groseilliers* determined to erect a fort and spend the winter. The following year *Gillam* returned to England with a generous supply of furs, leaving his companion in charge of the post. The success of the expedition aroused considerable enthusiasm for the fur trade, and showed the possibilities of the business if it could be established on a firm financial basis. For the purpose of organising it on a large scale *Rupert* gathered about him a group of influential men, and in 1770 received a charter from the King granting the *Hudson's Bay Company* extensive powers for the development of its affairs. The company, so ran the charter, was formed for the purpose of carrying on trade in furs and other commodities, and with this object in view it was given sole rights in all waters lying within *Hudson Strait* including the rivers flowing into *Hudson Bay*, and it was further granted jurisdiction over the lands surrounding these waters, provided such lands were not claimed by any Christian prince or state. The primary object of the company was, of course, the development of the fur trade, but the charter also included, among the reasons for granting the foregoing privileges, the implied agreement on the part of the company that it would search for a passage to the South Sea. With this document in hand the corporation began the erection of several posts on the shores of *Hudson Bay*, foremost among which was *Fort Nelson* at the mouth of the *Nelson River*.

While the English were thus pre-empting title to the bay

the French looked on with serious apprehension, for the bay was valuable as an avenue to the fur producing districts of western Canada. For this reason the French revived their ancient claims to the Hudson Bay region and sent out expeditions to forestall the English. But they were too late, and their only means of getting control of the country was by conquest. A military expedition was dispatched in 1685 under the Chevalier de Troyes and Le Moyne d'Iberville, who waged a rapid and highly successful campaign. Marching overland from the St. Lawrence they seized the forts on the Moose, Albany and Rupert Rivers. A treaty of neutrality was signed the following year, but it failed to have a quieting effect on frontier warfare; each side accused the other of violating it, and, as the outbreak of the War of the League of Augsburg in 1689 gave a validity to hostilities between French and English in all parts of the world, the struggle went on as before. Towards the end of the war Iberville was sent from France directly to Hudson Bay where he succeeded in capturing Fort Nelson the same year (1697) that the treaty of peace was signed between the two warring nations. By this treaty, that of Ryswick, each country was to return to the other such of the other's possessions as had been captured during the war, but as rightful ownership previous to the outbreak of hostilities had been a much mooted question, this provision of the treaty was never put into effect; hence the French retained Fort Nelson until the entire Hudson Bay territory was definitely ceded to England by the treaty of Utrecht in 1713.

While the French were occupying Fort Nelson on the Nelson or Bourbon River and Fort Bourbon on the Hayes or Ste. Therèse just south of the Nelson, an officer named Nicolas Jeremie held the position of lieutenant and later that of governor of these posts. Jeremie wrote an account of the region surrounding the western part of Hudson Bay

which in its day threw considerable light on those regions and was particularly illuminating to those interested in the Western Sea, for Jeremie had closely questioned the Indians who came to his post regarding the location of this ocean and the best way to reach it. According to his account the Nelson or Bourbon River comes from a lake called Lake of the Forts (or Forests), situated one hundred and fifty leagues from the mouth of the river. This lake is one hundred leagues in circuit. Into it there flows from the north a river from a great lake called Michinipi, six hundred leagues in circuit and distant three hundred from the Lake of the Forts. About its banks dwell the Assiniboines or People of the Great Water. At the other extremity of the Lake of the Forts the Nelson River again takes up its course, and after ascending it for two hundred leagues more one comes to a lake called by an Indian name meaning, "Junction of the two Seas," for the shores come together in the middle, thus forming a strait between its two component parts. One hundred leagues west-southwest, still along the Nelson, is Lake Winnipeg or the Little Sea, three hundred leagues in circumference. Into this lake the River of Stags (*Rivière des Cerfs*) discharges, a stream so long that the savages have never found its source. By this river one can join another that flows to the west. "I did my best," says Jeremie, "while I was at Fort Bourbon to send savages in that direction to learn if there were not some sea into which this river discharged, but they were at war with a nation that bars their passage. I questioned prisoners of this nation that our savages had brought expressly for me to see. They told me they were at war with another nation farther away than they in the west. These last say they have for neighbours bearded men who fortify themselves with stone and dwell in the same, a custom which the savages do not have. They say that these men have beards, are not dressed as they [In-

dians] are, and that they use white kettles. I showed them a cup of silver and they told me it was the same thing that the others had spoken of.”⁴

Save in a general way it is not easy to reconcile this description with a modern map. Lake Winnipeg appears to be the pivotal point since it flows into Hudson Bay by the Nelson River and receives from the west the waters of the Saskatchewan (*Rivière des Cerfs*). These are the actual geographical facts and they conform in a measure with Jeremie's description. There are intervening lakes between Winnipeg and the bay, many of them in fact, and from them two may be selected to fit in with those mentioned by Jeremie. Lake Michinipi may be Athabasca, as this is a large body of water in the proper location, or as near the proper location as can be expected. The French geographer, Philippe Buache, has carefully embodied this outline in his *Carte Physique* of 1754, and a glance at it will give a better idea of the facts as Jeremie understood them, than can be conveyed by a written description. Jeremie was greatly impressed by the possibility of reaching the Western Sea by the route he had sketched, so much so that he took pains to point out its advantages to the intendant, Begon, when the latter sought his advice about a voyage of discovery which he was contemplating. Jeremie further described a line of communication which would make this route accessible to travellers coming from eastern Canada by way of Lake Superior.

When, after the treaty of Utrecht, the French surrendered their forts on Hudson Bay to the English, the Canadians, in their search for the route leading westward, turned their attention to the means of reaching the chain of lakes and rivers described by Jeremie from Lake Superior instead of from Hudson Bay. Lake Winnipeg, long known by Indian tradition and soon to be discovered, formed a most im-

Explication des Signes marqués sur la Carte du Sauvage Ochagach.

- Rapides
- Petits Portages
- Grands Portages
- Côte du se font les Portages
- Hauteur des Terres
- Cours des Rivières

CARTE PHYSIQUE
des Terres
les plus élevées de la
Partie Occidentale
du CANADA :

Où l'on voit les Nouvelles
Découvertes des Officiers
François à l'Ouest du Lac
Supérieur Avec les Rivières et les
Lacs dont M. Jéromie a parlé dans la
Relation de la Baye de Hudson.
Dressée par Philippe Buache.

REMARQUES.

On a ici concilié les 3 Cartes de nos Officiers François dont il a été parlé dans les Considérations, pp. 39 et suiv. et l'on en a rapproché ce que M. Jéromie a dit du Cours de la Rivière de Bourbon. Nos Officiers ont observé que le Fort Kamaneestigouia est à 47° 21' de lat. le Fort St. Pierre à 47° 15' et le Fort St. Charles à 48° 27'. En conséquence de ces deux dernières Observations et du Cours des Rivières qui sont plus à l'Ouest on doit reconnoître que le Cours du Mississipi, qui nous est peu connu au des-sus du Saut St. Antoine, est de l'Ouest à l'Est et non pas du Nord Est, comme on la suppose jusqu'à présent.

Dans la Carte du Sauvage Ochagach, les Lacs et Rivières ont à l'O. du Lac Supérieur, au lieu que dans les Cartes des Off. François elles prennent la direction de l'ONO. Cette diff. semble venir en partie de ce que les Sauvages dans leurs courses ne font pas une assez grande attention aux différents points de l'Horizon où le Soleil se lève et se couche dans les diff. Saisons, et ainsi cette considération doit entrer dans l'examen de leurs Descriptions comparées avec celles des Nations plus éclairées.

Les Chaînes de Montagnes indiquées par la suite des Sources des Rivières, paroissent cette partie du Canada en trois Bassins Terrestres inclinés l'un vers le Golfe du Mexique et où coulent les eaux qui forment le Mississipi, l'autre vers la B. de Hudson où se jette la Riv. de Bourbon, qui est l'écoulement des Lacs nouvellement découverts, le 3^e vers l'Océan septentrional où se décharge le Fl. St. Laurent, qui étant principalement formé par les eaux du Lac Supérieur et autres, a ses sources, comme on le voit maintenant, vers les Lacs Sesakmagua et Tecamamouen, aux en-ri-rons duquel sont aussi celles de la Rivière de Bourbon.

Quoique nos Officiers aient marqué par des Signes sur les Cartes de leurs Découvertes, les Hauteurs des Terres et le cours des Rivières, ils ont cependant supposé, comme les Sauvages, de ces Communications prétendues de Rivières dont le cours est opposé, et aux quelles on ne connoît que par des Portages, ainsi qu'on en trouve plusieurs dans les Considérations, pp. 145 et suiv. Mais pour exprimer l'état naturel du Terrain, au lieu d'employer des Signes, on a représenté ici des Montagnes entre les Sources des Rivières voisines de la partie Occid. du Lac Supérieur, dont les unes s'y déchargent, et les autres coulent à l'Ouest ou au Sud.



portant junction for the routes to the west with those routes coming from the east. From Hudson Bay one could reach its waters by five rivers, the Nelson, the Hayes, the Churchill, the Severn and the Albany, of which the Nelson is the shortest and most direct. From Lake Superior Winnipeg could be reached by following the Kaministikwia and Dog Rivers to a height of land, where, after a portage, one reached *Lac des Mille Lacs*, then Rainy Lake. This, however, was a roundabout way, as the shortest and most logical trail lay up the Pigeon River through Rainy Lake and Lake of the Woods. From Lake Winnipeg there are two principal routes to the west: westward by the Saskatchewan, and southward to the Missouri by the Red River, the Assiniboine and the Mouse. These two rivers, the Missouri and the Saskatchewan, rise in the Rocky Mountains, whence two other rivers, the Columbia and the Fraser, flow westward to the Pacific. Lake Winnipeg was, therefore, the key to the situation; by discovering it the French would have a base for further exploration.

The first attempt to reach out in a northwesterly direction from Lake Superior took place in 1688, shortly after du Lhut had founded his post on Lake Nipigon. Jacques de Noyon, a young man of about twenty years of age, pushed forward up the Kaministikwia, and going on by the first route we described from Lake Superior, reached the Lake of the Woods. He himself believed that the route to the Western Sea lay before him, as indeed it did in a very general way, but he could form no conception of the great distance to be covered in making a journey to it, nor of the roundabout course that must be taken in order to reach the goal.

De Noyon's voyage does not appear to have excited much attention at the time, but later, when the French in America were beginning to urge the Regent at home to take up the

thread of discovery where La Salle had left off, we find that a detailed account of de Noyon's route was forwarded to him as evidence of the feasibility of the project. In a memoir attached to the joint letter of Governor Vaudreuil and the intendant Begon, in 1716, de Noyon's route is traced up the Kaministikwia to Dog Lake, then westward to Rainy Lake, and from there to the Lake of the Woods or, as it is called, Lake of the Cristinaux (Crees). "The Assiniboile savages," runs the memoir, "wished to take to the Western Sea de Noyon, a *voyageur*, about twenty-eight years ago. He had then wintered at the entrance of the Lake of the Cristinaux on the river Ouchichiq [Winnipeg River], which leads to the Lake of the Assiniboiles [Winnipeg] and thence to the Western Sea, where the savages were going to war to the number of about one hundred men against a nation whose men are only about three and a half to four feet tall and very stout. The Sieur Jeremie has seen at Hudson Bay two of them brought there by these savages who had taken them at the seashore, and who resembled other savages, except that they have the hair frizzled. These savages also told them that there were cities and fortified towns, that the men went on horseback and the women rode behind them; and that these men are white and bearded. The same savages say that they saw some ships, that they [white men] fired cannons, and if the said de Noyon had wished to make this voyage the savages had promised him he would be back in five months, having told him that the river was very beautiful, and after having found its ebb and flow they take three days to descend to the sea. Three days after reaching the rise and fall of the sea they cross the lands to get to a city which they say is very large in area and whose wall is of stone. They say that they have heard cannons fired and seen some ships at the mouth of this river, where they go to war against these little men, but they do not dare to approach

these cities and towns and they carry on no trade with the people living in these countries; they took some sheep of which de Noyon has two skins. M. d'Iberville, ship captain of the King, had a plan to make this discovery [of the Western Sea] by way of Hudson Bay at the time when it belonged to the French on the reports that the savages gave him and on the records of the English which were found at Fort Nelson at the time of its capture by the said d'Iberville in 1694.⁵ The English had before that time twice attempted to penetrate the extremity of the bay in its northern part, where they lost two vessels at two different times when they made this attempt, which two vessels were carried away by the ice, and this discovery can only be made by wintering some ships at Fort Bourbon, so as to profit by [the season for] navigation which is very short, so much the more so as it might be necessary to go by 80 degrees of north latitude, and according to the reports of savages it is necessary to go as high as 90 degrees. However, M. d'Iberville had planned to make its discovery with barks and canoes following the coast. It is this that makes one believe that it is almost impossible to go to the Western Sea by the north, and that no advantage can be gained from commerce with the Western Sea except it be carried on by the lands of this continent according to the project attached hereto."⁶ Whether or not it was possible to discover the Western Sea by a passage in the northern part of Hudson Bay the French now had no choice in the matter, since the British at the time this letter was written held all the posts on the bay; and it was well for their peace of mind that they considered the overland route to be the only practical one.

The Council of Marine took up the suggestion made by the governor and gave it favourable consideration. Preliminary steps in the work of discovery should be taken, they decided, by establishing posts in the western country by

means of which two objects could be accomplished: first, the discovery of the Western Sea with its resultant commercial relations with the Far East; and second, the securing of the fur trade which these posts would be able to divert from the English on the bay. "MM. de Vaudreuil and Begon," said the Council, "believe that one of the means which should be taken to extend the commerce of the colony and render it very useful to France is to make the discovery of the Western Sea, which is the sole direction in which no effort has as yet been made to penetrate. Some travellers have already been as far as the Lake of the Assiniboels,⁷ which is the farthest distant of all those known on the continent, and there is found a river which goes from this lake into the Western Sea on which barks can navigate. Some savages have brought from this lake to M. le Comte de Frontenac some pieces of silver money which appear to have Chinese characters on them, which they say they obtained from a ship with which they had traded at the seashore; they reported to him that they had also obtained axes which were made in the shape of round shields." The Council goes on to consider the reports made to M. d'Iberville, when he was at Hudson Bay, by Indians who claimed to have been in touch with Europeans on a western sea, as well as a memoir respecting de Noyon; then taking up the advantages of commerce with the western territory they proceed to sum up their views on the subject as follows: "If the discovery of the Western Sea were made, France and the colony [Canada] could obtain great advantages from it for trade, because Lake Superior discharges itself into Lake Huron, which falls into Lake Erie, and this last into Lake Ontario, whose waters form the St. Lawrence River. We could have in each one of these lakes, which are all navigable, some barks to facilitate the transportation of merchandise which could come by canoe from the Western Sea to

Lake Superior, the rivers being easily navigable. This navigation would be short considering that which the vessels make from Europe to get there [to the Western Sea], and subject to far less risk and expense, which would give us so great an advantage in the commerce of that country that no nation in Europe could compete with us." In order to accomplish the discovery the Council believed that three posts should be established; one at the mouth of the Kaministikwia, another at Rainy Lake, and a third at the Lake of the Woods. This could be done with no other expense to the King than a few presents for the natives. For the performance of this ambitious undertaking Vaudreuil was to send seven or eight canoes to found the first post and, if possible, the second. After the three posts were established an effort could be made from the fort on Lake of the Woods to find the Western Sea by sending a detachment of men with the Indians who go to the ocean, and from the information these men gathered it would be possible to arrange for the discovery of the entire country. Begon considered it necessary to send a force of fifty Canadians, and he specified Canadians in preference to French because the former were better accustomed to bear the fatigues of such a voyage. His desire to send out so large a force was to make it possible to found a suitable establishment on the western coast if the commercial possibilities of this region should make such a step desirable.⁶

The Regent endorsed the plan, but owing to the state of the government's finances he permitted for the present only the erection of posts, and requested a detailed account of the proposed discovery with special reference to the cost of the undertaking. The posts themselves, the Regent said, should be self-supporting, for the men stationed there could carry on a lucrative commerce in furs; but for continuing the work of discovery it would be necessary to call on the King

to supply the funds, as those engaged in this task would be unable, because of the magnitude of the voyage, to busy themselves with trade. Vaudreuil and Begon estimated the cost of a journey lasting two years and conducted by fifty men, half of whom would remain at the posts, at fifty thousand *livres*.

Meanwhile a tentative expedition was sent out to prepare the way for the great undertaking. Governor Vaudreuil selected for the purpose Lieutenant Robutel de La Nouë, a native of Montreal, who had served under de Troyes on the military expedition to James Bay. He reached the Kaministikwia in the fall of 1717 and built a small fort there, then, pushing farther up the trail towards Lake Winnipeg, he built a second post on Rainy Lake. Beyond this point he did not venture to go. There were obviously many things to be arranged before an attempt could be made to reach the sea. La Nouë felt that it would be advisable first of all to make peace between the Sioux and Cristinaux, as it would be dangerous to go out into the wilderness and leave hostile tribes in the rear ready to fly at one another's throats; and in addition to this he would be able by making peace to bring together the various tribes of the Northwest, and to learn from them the nature of the country about him and the topography of the region he would be obliged to traverse.⁹

There does not seem to have been any effort made to push La Nouë's expedition any further or to organise another in its place. The careful inquiry made into the cost of the journey, and the unwillingness of the government to venture in the enterprise more money than was actually necessary, would indicate reasons for abandoning the undertaking. And good reasons they were, too, for the French treasury at the close of the War of the Spanish Succession was sadly

depleted and consequently unable to risk much on a venture that promised no immediate or certain returns. The Regent's government, be it said to its credit, had shown sufficient interest in the discovery of the sea to request an estimate of the expense it would involve, but on second thoughts it determined to make a complete investigation of the geographical data of America so that there might be no false step taken in dispatching an expedition across the continent. For this purpose Father Charlevoix was sent to Canada to make a comprehensive survey of the country. The report he turned in, it will be remembered, suggested two solutions of the problem: one, an expedition up the Missouri, which offered a direct line of communication, but which was sure to be an expensive plan; the other, a gradual extension of French influence by the establishment of missions, a cheaper and safer procedure. The Regent chose the latter.

The founding of missions and posts was a tedious process. Vaudreuil, anxious to preserve amicable relations between the northern tribes, sent out a party under the leadership of Legardeur de Saint-Pierre to found a post on Lake Superior which would prevent, so he hoped, an impending warfare that would work havoc with the fur trade. While the establishment of the various posts was ostensibly for the purpose of furthering the discovery of the Pacific, the importance of the fur trade soon overshadowed this consideration. Two posts, one among the Sioux on the St. Croix River, the other on Rainy Lake at Tekamamiouen, are pointed out as being especially valuable to the colony, because the supply of beaver in the vicinity of the more easterly stations had been materially diminished. Moreover, it would be possible from these coigns of vantage to deflect the trade from Hudson Bay, where the English were profiting greatly by it. In the course of time, it was hoped, the

tribes could be induced to assist the French in ousting the English from their possessions on the bay should war break out between France and Great Britain.¹⁰

With the mission posts, as distinguished from the purely trading stations, the case was similar, for the fur business was expected to defray the expenses of the missionaries. In compliance with the wishes of the King, inspired by the suggestion of Charlevoix, Père de La Chasse, superior of the Jesuits in Canada, arranged for Father Guymoneau to proceed to the Sioux in the spring of 1724, and found a mission among them. Means were to be furnished him for his undertaking and, so wrote the governor and intendant, "the Sieurs de Vaudreuil and Begon will render an account of what they learn from the information gathered by these missionaries, which will facilitate the discovery of the Western Sea."¹¹ The founding of the mission on the Mississippi, strange to say, caused violent displeasure among the Foxes and Kikapoos, who went so far as to kill several Frenchmen on the ground that a post of this sort would lead to the Sioux trading with the French and thus deprive them of the traffic they were carrying on with the Canadian traders. Arrangements were finally made in the year 1727 for sending two Jesuit missionaries, Fathers Degonnor and Guignas, to this station. The Marquis de Beauharnois, who succeeded Vaudreuil as governor of Canada, drew up a document making an agreement with a group of adventurers, known as the Sioux Company, whereby, in consideration of exclusive trading privileges in the Sioux country for a period of three years and a promise to erect forts there, they were to afford protection and transportation for the missionaries. In this manner the work could be carried on without expense to the government. Nothing was said in the agreement with the company about discovery or exploration, but a request on the part of the missionaries for mathematical instruments shows

that these men intended to devote a portion of their time to other things besides religion.

The party headed by René Boucher, *Sieur de La Perrière*, left Montreal in June, 1727, and made its way to Michilimackinac. Here a halt was called, then the adventurers proceeded leisurely up Green Bay, where they entered the Fox River, and eventually reached the Mississippi by the Fox-Wisconsin portage. Turning their canoes northward, they ascended the great river until they reached an expanse of its waters known as Lake Pepin. On the shores of this lake a site was selected for the post, and in a few days the fort was completed. Whatever may have been the object of the home government in urging the establishment of this post, and the intentions of the Jesuits who accompanied the expedition, it is certain that the discovery of the sea received no attention. Those who had backed the enterprise were interested in trade, and in trade only. The post remained standing for a few years and appears to have been a profitable venture, for Governor Beauharnois, in commenting on the situation, reported favourably on the quantity of beaver skins sent down to the eastern settlements. "Business goes on quietly," he says, "and the behaviour of the Sioux to the present time, especially with regard to the Foxes to whom they have refused asylum, makes me think that this establishment will sustain itself more and more, and that one may look forward to a successful future for it."¹² But as the work of discovery along the Mississippi fell into abeyance the search for the Western Sea sprang to life on the chain of lakes and rivers connecting Winnipeg with Superior, and we find, on glancing in this direction, that for many years the centre of the stage is occupied by the *Sieur de La Verendrye*.

Pierre Gaultier de Varrennes, *Sieur de La Verendrye*, was born at Three Rivers in 1685. At an early age he took up

the profession of arms and served against the British in New England and also in Newfoundland. Crossing to France during the War of the Spanish Succession, he fought with distinction in Flanders and was severely wounded at the battle of Malplaquet. His services were rewarded on his return to Canada by an ensign's commission. Several years later an opportunity was presented him of securing active employment, and as his tastes were always for a life of adventure he gladly accepted the position of commander of the trading post on Lake Nipigon. The life of a mere fur trader, however, was scarcely exciting enough for a man of his temperament, and he soon became interested in the possibility of discovering the Western Sea, as this body of water was said to be situated somewhere to the west of his post. During the year 1728 an Indian named Ochagach succeeded in gaining his ear for such a project. The savage roused his imagination by telling him of a great lake beyond Superior whence flowed a river to the west. He (Ochagach) had gone down this river, so he said, until he came to an immense body of water that ebbed and flowed, and terrified by this phenomenon, he ventured no farther, but returned after learning from the Indians whom he met in the locality that the river emptied into a great salt water lake. Ochagach had presumably reached the Lake of the Woods by the Kaministiquia route and descended the Winnipeg River to a point where he heard of Lake Winnipeg, reported to him as the great lake whose waters were salt. The Indian also drew a map of his journey showing a fairly good outline of the series of lakes and rivers connecting Superior with Winnipeg.

La Verendrye, on hearing this account and on glancing at the Indian's map, saw before him the means of realising his dream of making a discovery worthy of the great explorers of New France. Ochagach's sketch showed the route

by lakes and rivers to Lake Winnipeg, and from the latter body of water La Verendrye saw a stream leading to the west. La Verendrye did not hesitate but, taking the sketch with him, set out at once for Montreal. On reaching Michilimackinac he met Father Degonnor, one of the missionaries who had been at the post on Lake Pepin, and who was greatly interested in the prospect of exploration. The priest had reached the conclusion, founded on observations made during his stay on the Mississippi, that nothing could be accomplished by trying to find a route through the Sioux country, but he believed, as did La Verendrye, that a solution of the problem could be obtained by following the directions given by Ochagach. La Verendrye, therefore, turned over to Father Degonnor a report of Ochagach's story and the map drawn for him by the Indian, with instructions to proceed to Quebec and place these documents before Governor Beauharnois with a request that he would use his influence with the home government to secure the necessary backing for a voyage of discovery. Shortly afterwards La Verendrye followed Degonnor to Quebec to plead his case in person.

Beauharnois was enthusiastic over the prospects of such a discovery and made every effort to present the plan in a favourable light to the French authorities. "I have the honour," he wrote to Maurepas, "of sending you a copy of a map of the course of the western river made by the savage Ichayac [Ochagach] and others. If these savages say truly, this river must discharge above California. The Sieur de Chaussegros¹³ has marked on the map of Sieur de Lisle, on a loose leaf, the course of this river according to the map. He finds that this river discharges itself by the mouth [of the river] discovered by Martin Daguillar.¹⁴ He has also sketched the map of the savages on which there are three scales, while his [map] is made in one only, where one sees

the course of this river from the height of land which runs from above Lake Superior to just above California. The savages have marked on their map the upper Mississippi River which rises south of Lake Ounipigon [Winnipeg], and on the map of the Sr. de Lisle the Rio Colorado would have its source near the same place.¹⁵ I remarked to Sr. Chaussegros that this country being traversed by two large rivers which have their sources towards the middle [of the country], one running towards the east which is the St. Lawrence, another to the south which is the Mississippi, there remains in the west a space of country from seven or eight hundred leagues broad without any great river. This is contrary to all knowledge we have of all known countries in the world; for where there is so great a space there is always some large river that flows across it, which causes us to believe that the savages may be right, it being unnatural that in so great a space there is found no great river, and it seems that the river of which the savages speak discharges into the South Sea.”¹⁶

In the end Beauharnois's enthusiasm bore fruit. A large amount of correspondence on the subject of La Verendrye's plan passed between Beauharnois and the intendant Hocquart on the one hand and the officials in France on the other, the gist of which was the question of how the expedition was to be financed, for there does not seem to have been any doubt in the minds of the French authorities that the scheme was a good one. The governor repeatedly urged the King to bear half the expense of the undertaking, but the best he could do was to obtain for his protégé, La Verendrye, a monopoly of the fur trade in the Northwest, and with this as security he was able to induce some merchants of Montreal to finance the project. Beauharnois and Hocquart, after La Verendrye had returned to his western post, wrote Maurepas and pointed out to him the advisability of establishing

posts on Rainy Lake and Lake of the Woods where the traders would be in touch with the Assiniboines, and thus the business of fur gathering in the West would be placed on a sound basis. In reply to a suggestion which had been made of pushing through to the sea without a stop, a method which appeared to be contradictory to the policy of extending French influence gradually by the establishment of outposts, the writers interpreted this to mean merely that the main object of the expedition, that is, the discovery of the sea, should not be lost sight of in the more pressing business of financing it by fur trading.¹⁷

La Verendrye's plan was also highly recommended to Maurepas by a man¹⁸ who had been charged by the Duke of Orleans in 1720 to discover the Western Sea. This individual found that La Verendrye's opinions agreed with his own. He points to the need of conciliating the Sioux and of keeping in close touch with them as a necessary preliminary to the journey, for they knew the western and northern country; and, in his opinion, it would also be highly advisable to get all possible information from the tribes so as not to mistake the route. The expedition, he believed, in contradistinction to the policy of Beauharnois, should be pushed through at once, as such a method of accomplishing the job at hand was in the long run less costly than the system of founding posts in the region to be traversed. Yet when the time came La Verendrye, owing to the financial difficulties which constantly beset him, difficulties aggravated by the hostility of fur merchants who were jealous of his opportunities in the Far West, and were constantly representing his actions as springing from motives of gain rather than from a desire to discover the Pacific, was unable to carry out an energetic scheme of driving through to the sea, but was obliged to spend much valuable time in founding trading posts on

the lakes north of Superior in order to collect enough furs to provide funds for his great enterprise.

Accompanied by his sons, Jean-Baptiste, Pierre and François, and his nephew, La Jemeraye, La Verendrye left Montreal in June, 1731, and made his way quickly to the portage at the mouth of the Pigeon River about fifteen leagues southwest of the alternate route by the Kaministikwia. The length of the portage—it was about three leagues—disheartened his followers, who took the occasion to mutiny, and refused to go any farther. In this they were encouraged by certain *voyageurs* in the party who had probably been bribed by the fur merchants of Montreal to do what they could to block La Verendrye's plan of going west and to keep him near Lake Superior where he might devote his entire time to collecting furs. But, thanks to the good offices of Father Messenger, a missionary who had joined the party at Michilimackinac, the mutineers were induced to listen to reason, and several of them were soon persuaded to accompany La Jemeraye and one of La Verendrye's sons to Rainy Lake, where they were to establish a fort, while La Verendrye and the remainder of the party remained at Kaministikwia for the winter. Matters were thus arranged, and La Verendrye spent the winter gathering furs. The following May saw the return of the canoes he had sent out, and these with their cargoes were at once dispatched to Michilimackinac under La Verendrye's eldest son, Jean-Baptiste, who was to bring back the additional supplies which had been sent there from Montreal. La Verendrye then took the rest of the party with him, leaving some to guard the post, and proceeded to Rainy Lake, where he met the vanguard of the expedition at Fort St. Pierre, the post which they had built as a trading station at the mouth of the lake. Accompanied now by over fifty canoes of Indians, the Canadians moved in state to Lake of the Woods, on the south-

western shore of which they erected Fort St. Charles, about eighty leagues from the post on Rainy Lake. Here they spent the winter.

The following spring (1733) La Verendrye determined to establish a third fort, this time on Lake Winnipeg itself; but when a canoe came from Kaministiquia with the doleful news that the companions he had left there to carry on trade and guard the merchandise had consumed everything, and when the detachment arriving from Michilimackinac was found to be in poor condition, he saw the impossibility of undertaking any further work, for the loss of his furs prevented him from paying off the debts he had incurred to finance the expedition. La Jemeraye and Father Messenger, therefore, returned to Montreal. La Verendrye remained another winter at Fort St. Charles eking out his sustenance by hunting, and in the spring of 1734 sent Jean-Baptiste to build Fort Maurepas on Lake Winnipeg, while he himself gathered together the remnants of his party and returned to Montreal.

News of his successes in the field and his failures in trade had, however, preceded him by the detachment he had sent back from the posts north of Lake Superior. But before he reached Montreal Beauharnois had written to Maurepas regarding the financial difficulties which surrounded the explorer. The governor had received word from Jemeraye holding forth encouraging prospects of finding the Western Sea; but unfortunately La Verendrye had already lost 43,000 *livres* and his nephew did not feel that the number of beavers they could capture would be sufficient to pay for the expedition; therefore Beauharnois felt constrained to ask for royal assistance.¹⁹ He also sent to the French officials copies of letters he had received from La Verendrye, and a digest of these was presented to the King. Louis, in a reply, voiced through his minister his approval of the

erection of the forts on Rainy Lake and Lake of the Woods—this was before he knew of Fort Maurepas on Lake Winnipeg—and expressed his pleasure at noting the friendliness of the Cristinaux, and hoped for similar relations with the Assiniboines.

Yet the Crown was unwilling to bear the expenses of a voyage of discovery. "I have advised the King of the proposition you have made to undertake on his Majesty's account the continuation of the enterprise of discovering the Western Sea," wrote the Minister of Marine to Beauharnois, "but whatever may be the appearance of success, his Majesty has not deemed it fitting to incur such an expense. Those who are interested in this undertaking must be in a position to continue it with the profits they make on the furs they have brought to trade. But his Majesty can afterwards reward those who have employed their time to the success of the enterprise according to the testimonies you render of their conduct. His Majesty has already given this year an ensign's commission to the Sieur de La Jemeraye, as I am informing M. le Marquis de Beauharnois by special letter."²⁰ The government was anxious to shirk the burden of financial obligations in furthering La Verendrye's schemes; and though later, when notified of the erection of a fort on Lake Winnipeg, the King expressed a hope that it might lead to further discoveries, he was still emphatic in his refusal to provide the necessary funds. La Verendrye was not discouraged by his failure to obtain from the French Court something more substantial than good wishes and approval of his undertaking, but at once began his preparations for returning to the Northwest. He left Montreal in June, 1735.

A few days after La Verendrye's departure a young missionary who had just come to Canada for the purpose of carrying on his evangelical labours in the remotest parts of

Canada, started out after him. The reports brought back by La Verendrye had filled the youthful priest with enthusiasm, and he hoped to found an outpost that would form a link between the French and the white people who, he was told, lived on a river leading to the Western Sea. In planning his excursion he took for his objective a tribe known as the Ouant Chipouanes (Mandans), a nation dwelling beyond the Assiniboines and Cristinaux, where he would establish a mission.²¹ But all persons were not so strongly impressed with the accuracy of the Indian reports brought back by Canadian adventurers as Father Aulneau. Among those who viewed them with a sceptical eye was Father Nau, who in writing to a fellow ecclesiastic thus expresses himself on the veracity of the Indian: "The French who returned this year [1734] from the upper country have informed us that the Indians told them that eleven hundred leagues from Quebec there are white people wearing beards who are subjects of a king; that they have horses and other domestic animals. Would they not be Tartars or stragglers from Japan? The Indians spoke to these nations about the French, and they [the nations] were delighted to learn that in Canada there was a white nation bearded like themselves. 'The French to all appearances are our brothers,' they said, 'and we would like them to come here among us.' If this story be true there is then another splendid opening for the Gospel. But we cannot count much on the sincerity of the Canadians [i.e., Indians] who have spread this report, for there is no country in the world where more lying is done than in Canada."²² Aulneau, however, fully relied on the Indians and planned to follow in La Verendrye's footsteps to Lake Winnipeg, whence he would start for the country of the Ouant Chipouanes the following spring in the hope that these people were not far from California, for, according to rumour, they lived on the shores of a great river which

ebbed and flowed, a sure indication of the proximity of the sea.

Greatly elated, Father Aulneau set out from Montreal on the thirteenth of June, and after traversing the long trail through the lakes, caught up with La Verendrye at Fort St. Charles the following October. Matters were not going on well in the western posts. The men at Fort St. Charles had run out of supplies and were in despair of getting in a crop of wild oats because of the flooded conditions of the surrounding country. To relieve the situation La Verendrye sent Jemeraye with a number of men to Fort Maurepas, where it was hoped they might find subsistence. He himself remained at Fort St. Charles, but he had left his canoes at the portage, a misfortune which left him short of provisions, so that by the following spring (1736) he found his supplies completely exhausted. In June his sons returned from Fort Maurepas with the news that Jemeraye had died during the winter and that those left in the fort were on the verge of starvation. La Verendrye immediately sent Father Aulneau and his eldest son, Jean-Baptiste, to Michilimackinac for provisions, but scarcely had they left the fort when they were set upon by a band of Sioux and massacred. Despite these misfortunes, La Verendrye courageously remained at his post for another year in the hope that a change for the better might take place, but matters failed to improve, and he felt it necessary to return again to Montreal.

La Verendrye was not welcomed this time with open arms by the governor; on the contrary, Beauharnois, though by no means harsh with the explorer, for he was much attached to him and believed him sincere in his purpose, pointed out to him the unwisdom of leaving his post, and impressed upon him the fact that this was not the way to discover the Western Sea. La Verendrye defended himself as best he could. It was impossible, he said, to go any farther

under the circumstances, and as proof of his assertions he presented the governor with a journal of his voyages and a map of the territory he had traversed, which papers the latter immediately sent to Maurepas. Beauharnois's task of backing La Verendrye was by no means an easy one, for there were strong prejudices working against him in France as well as in Canada. He was charged with bad faith. His plan of discovering the Western Sea was regarded as an excuse for getting himself sent to the Northwest where he could engage in fur trade to his own advantage. A permit had been granted him to establish posts which were to be used for the benefit of the fur merchants on condition that he did not himself engage in trade, and this condition he was said to have violated. Father Nau, in speaking of Aulneau's projected voyage, expressed the popular feeling about western exploration in a somewhat sarcastic manner, though he blames the cupidity of the local officials rather than the acquisitiveness of La Verendrye. "I had a fairly long conversation with Monsieur La Verendrye who is in command of the three most western forts," he wrote Father Bonin. "I understood from the interview that not much reliance can be placed on what he says concerning white, bearded savages. The Western Sea would have been discovered long ago if people had wished it. Monsieur the Count de Maurepas is right when he says that the officials in Canada are looking not for the Western Sea but for the sea of beaver."²⁸

Maurepas was indeed suspicious of La Verendrye, and even the misfortunes which the latter had suffered in the Northwest did not serve to mollify his opinion; in truth these mishaps appeared in some manner or other to confirm the unfavourable impression which the minister had formed, and La Verendrye became fearful lest it should be necessary for him to abandon his posts. But Beauharnois stood

by his friend loyally. "I remember, monseigneur," he wrote to Maurepas, "that you did me the honour to advise me that you thought the views of the *Sieur de La Verendrye* were to search for beaver and not to discover the Western Sea. Without the attack [by the Sioux] which took place and the debts I know he has incurred I could suspect him of it, but I know, monseigneur, that he found himself without provisions and no one to accompany him on his route. Besides he did not know if Frenchmen would be sent again to these posts. He believed that *engagés* could be sent to search for furs and to bring back the goods. I warned him that if he came down [to Montreal] he would not return again; he promised me that he would go the following year to a place one hundred and fifty leagues from the *Ouatchiouanes* [Mandans], who are called at present *Kouateattes*; that he would go to them in the winter and that in the month of September, 1739, I should receive an account of his voyage." ²⁴

On receipt of *La Verendrye's* journal, which *Beauharnois* had sent him, *Maurepas* was even stronger in his condemnation of the explorer's actions in the field, while his suspicions of his sincerity were, if anything, enhanced. "I have examined attentively the journal you have sent me regarding the *Sieur de La Verendrye*," he wrote to *Beauharnois*, "and I admit that I was not a little surprised to see the small progress that this officer has made in the discovery of the Western Sea since the preceding memoir which he sent you. In fact it does not seem that this enterprise was pushed on as well as one might expect; and if it is not pushed with more energy one must not flatter oneself that it will be finished. I do not even know if the zeal of the *Sieur de La Verendrye* is as disinterested as you suppose, and if the suspicions I had already conceived and of which I did not leave you in ignorance, do not justify themselves. It is certain,

however, that the line of conduct to which he has held up to the present time tends strongly to justify them: and whatever he may say concerning his last journey to Montreal he cannot justify himself for having thus abandoned his post, instead of profiting of the time to penetrate farther. However, it may be one can only at present await what he will do. I hope he will be able to destroy the suspicions to which he has given rise up till now, and I should be pleased to see in the report you will send me next year of his movements that he has made satisfactory progress in this direction.”²⁵

Beauharnois, despite the earnest efforts he made, for his correspondence with French officialdom on the subject of La Verendrye is voluminous, was unable to lull the suspicions which arose regarding his *protégé's* disinterestedness. At best he could only secure the expression of a hope that La Verendrye would be able to destroy the unfavourable impression he had created. The officials living in France could not grasp the difficulties besetting the explorer in the wilderness of western Canada, not to mention the artificial obstacles placed in his way by his fellow countrymen at Montreal. The government had granted him a monopoly of the fur trade in the Northwest, and this naturally excited the jealousy of traders who saw, or feigned to see, in La Verendrye's dash for the Western Sea a mere blind to exclude them from trading in a particularly promising region. La Verendrye's failure to penetrate farther west and his work of erecting forts at various points of vantage, which forts were necessary if he was to gather sufficient furs to finance his expedition, gave colour to the accusations, and the slanderers had no trouble in presenting their side of the story at Court. The ministers, unable to get at the bottom of the case, were inclined to judge by appearances, and thus La Verendrye was condemned despite his protests. Fortunately his friendship with Beauharnois stood him in good stead; it

secured for him official sanction for his undertaking, though it did not supply him with funds.

La Verendrye returned west in June, 1738, and reached Fort St. Charles on Lake of the Woods in September. From there he made his way to Fort Maurepas for the purpose of undertaking a voyage to the Mandans, a tribe which, as we have seen, was said to be situated not far from the sea. On leaving Fort Maurepas La Verendrye crossed the southern end of Lake Winnipeg to its affluent, the Red River, which he ascended to the mouth of the Assiniboine, a stream flowing into the Red from the west. Here, finding a route westward, the party turned their canoes up the Assiniboine River and paddled along until they reached the site of the modern town of Portage La Prairie, where, finding the water too shallow to permit further navigation, they halted and built Fort La Reine. At this point the explorer decided to leave the Assiniboine and push on in a southwesterly direction to the Mandan villages. Leaving a detachment to guard the fort, he selected a suitable company from his followers and, taking his two sons with him, set out on the overland trail to the villages. The party proceeded in a roundabout way, being at the mercy of an Indian guide who led them from their course to an Indian village which he was anxious to visit, but at last, after a lengthy peregrination, they reached the Mandans on the banks of the Missouri, and were received in a friendly manner by the chief. The village where they stopped was located, according to modern research, in McLean County, on a large bend of the river in the northwestern corner of Fort Berthold Reservation.

La Verendrye was eager to learn about the people who lived farther down the Missouri, and on making inquiries of the Mandan chief he was told that there were five forts held by Mandans lower down the river, and that at a day's journey below the last one were the Pananas and Pananis

(Pawnees) who grew wheat and tobacco on the banks of the river where it was very wide. Its waters, moreover, were bad for drinking. All these lands on the lower Missouri were inhabited by whites like the French who worked in iron and rode on horseback, and further "these men could not be killed by arrow or musket, being covered with iron, but by killing the horse the man could be caught easily, as he could not run; further, he had a shield of very clear iron, and fought with lances and sabres, with which he was very skilful; the women were never seen in the fields; their forts and houses were of stone."²⁶ To reach these people, the Indians said, would take an entire summer. His interest roused by this information, La Verendrye sent one of his sons to a neighbouring village on the banks of the Missouri to learn, if possible, the direction in which the stream ran. The younger La Verendrye struck the river at a spot known later as Old Crossing, where it takes a turn and appears to flow, as he reported, southwest by south, and probably empties into the sea. Putting the two bits of information together, La Verendrye came to the conclusion that he had found a river flowing to the South Sea, on the lower reaches of which were settlements of Spaniards.²⁷

A consultation was now held between La Verendrye and a companion named La Marque at which it was decided, after a careful survey of the situation, to return home. The interpreter whom they had brought with them had left in company with the Assiniboines, thus putting the French in an uncomfortable position; and they had reason to fear that the roads would be impracticable if they waited until spring, because of the high waters that rendered travel extremely difficult during that season. It was therefore decided to leave two men with the Mandans to learn the language and fit themselves to act as interpreters when La Verendrye came back to carry on his explorations. On leaving the Mandans

in company with two Assiniboines who had remained with them, La Verendrye took the first opportunity to reproach the savages with having lied to him, for, as is evident from his journal, he had been led to believe that there were people living near the Mandans who were like the French—that is the Spaniards—whose presence betokened the proximity of the sea, and this information had been given to him by the Assiniboines. The Indians stoutly maintained that they had spoken the truth, but were not referring to the Mandans; on the contrary, they had in mind another people living farther away. One of them swore he had slain a man clothed in armour. He said furthermore in speaking of the Missouri along which these strange people were supposed to dwell: “The other side of the river cannot be seen; the water [lying beyond it] is salt; it is a country of mountains; [there is] a great extent of fine land between the mountains; . . . what I tell thee [La Verendrye] is without deceit; thou wilt learn further of it afterwards.”

In summing up the extent of the geographical knowledge pertinent to his purpose La Verendrye states that he had at last found a river flowing to the west, for all the lakes and rivers he knew of, save the river of the Mandans (Missouri), went to Hudson Bay, and he promised to investigate it further during the coming summer. With this erroneous opinion he was perforce obliged to remain content, and, satisfied with his first visit to the Mandans, he returned to Fort La Reine. La Verendrye had, according to his belief, discovered the river to the west which the French had heard so much about from the Indians. To continue the work of discovering the Western Sea, or probably the South Sea, since the Missouri was believed to run in a southwesterly direction, would be a comparatively easy task, and it was to this work that the explorer, with renewed hopes, now bent all his efforts.

La Verendrye's account of the voyage was sent to Beauharnois, and by him it was promptly forwarded to France. The government was impressed, though but moderately, with the progress the explorer had made, and the Minister of the Colonies wrote the governor in a more cheerful vein. "However it may be," he concluded, "the action which the Sieur de La Verendrye has taken of leaving two Frenchmen with the Mandans to learn the language of this nation may put him in a position, if these two Frenchmen succeed, to push the route farther and with greater ease; and when once he has come to the Pananis [Pawnees] and has thoroughly reconnoitred the river mentioned in the relation whose waters he was told were salt, we believe that he can get more accurate information regarding his object."²⁸ La Verendrye apparently shared the enthusiasm of his government despite the setback he had received when he found it impossible to go any farther than the Mandan villages. While recuperating from his fatigues at Fort La Reine he sent one of his sons to Lake Manitoba to find a suitable location for a fort, and from there to proceed to the northern part of Lake Winnipeg to survey the terrain about the Saskatchewan with a view to building another fort near its mouth. La Verendrye himself remained at Fort La Reine throughout the summer, and in September the two men he had left among the Mandans arrived there with an interesting account of their stay with these Indians. They said that towards the end of spring a tribe of savages arrived at the villages with several horses, not a common sight among the Indians with whom the French had been in touch, and it was rumoured that they had with them Indians who had come from the west where the white men dwelt. The interpreters at once visited these men and learned from them that the people in question had characteristics which showed them to be Spaniards.

Meanwhile other matters, financial ones, unfortunately, engaged La Verendrye's attention in another direction. He had sent his canoes in May (1739) to the portage on Lake Superior to gather the supplies which his agents had promised to procure for him. The party remained at the portage for eighteen days, when, being nearly starved, they were obliged to embark in their canoes and make their way to Michilimackinac. On their arrival a claim against La Verendrye was served on them authorising the seizure of his goods to the amount of four thousand *livres*. Caught in this embarrassing predicament, they appealed to the commander of the station for relief, explaining the difficulties in which La Verendrye was placed and his immediate need of supplies. The commander took compassion on the travellers, furnishing them with the necessary provisions to enable them to return to Fort La Reine. They arrived at this post in October.

La Verendrye was now at the end of his resources. Seeing the desperateness of the situation, he determined to go to Montreal for the fourth time and plead his case in person. Stopping at Michilimackinac long enough to send provisions to his sons, together with orders to the eldest, Pierre, enjoining him to go at once to the Mandans and obtain a guide to conduct him to the Western Sea, La Verendrye made his way down the Ottawa River and reached Montreal in August, 1740. On his arrival he was received in a friendly manner by Beauharnois despite the legal, as well as financial, difficulties in which he was involved, for no sooner had he set foot in the town than he was threatened with a lawsuit concerning the posts he had founded in the Northwest. The governor took sides with him and used his influence to arrange matters so that he might continue his work without further embarrassment. Glad to get out of his troubles so lightly, La Verendrye hastened to take leave

of his unfriendly surroundings in the city, and make his way back to Fort La Reine, where he arrived in October, 1741, accompanied by the missionary, Father Coquart.

Before leaving Fort La Reine for Montreal La Verendrye had ordered his son, Pierre, to go (in the fall of 1740) to the Mandans with two Frenchmen, one of whom was to be an interpreter, for the purpose of getting guides among the Mandans who would take them to the sea. On his return La Verendrye found Pierre already back from the Mandans without having gone any farther than their villages; but he had brought with him a cotton blanket said to have been made by the whites who lived by the sea. La Verendrye thereupon dispatched him to build the forts on Lake Manitoba and on northern Lake Winnipeg, which he named Dauphin and Bourbon respectively.

The time had now come for the final attempt to discover the Western Sea. La Verendrye did not take part in the undertaking, but remained at Fort La Reine, while his two sons, Louis-Joseph and François, called the Chevalier, started off on the ninth of April, 1742, for the villages of the Mandans. The two young men reached their destination after an uneventful journey over the route their father had previously taken, and remained there until the latter part of July awaiting the arrival of the Horse Indians who, it was hoped, would act as guides for the journey westward. As the season was now well advanced and the savages did not put in an appearance, the brothers obtained two Mandans to guide them to the territory of the Horse Indians. With these men they set off in a west-southwesterly direction which appeared to them a good indication that the route was leading them to the sea. Three weeks later they reached a mountain which the Chevalier called the mountain of the Horse Indians, where they decided to encamp, in the hope that some members of this tribe would come their way, for

the Mandan guides refused to proceed any farther. While camping in this locality the French came into touch with a nation which they called the *Beaux Hommes* (probably the Crows), from whom they succeeded in getting the necessary guides to lead them to the Horse Indians, in place of those who were about to leave them. The party now took up the march again, and proceeding this time in a south-southwesterly direction presently came upon a village of the Little Foxes and informed them that they were looking for the Horse Indians to lead them to the sea. The entire village turned out and accompanied them, so that, as the Chevalier puts it, "I felt certain that we could find only a well-known sea." By this he meant that since they were moving in a southwesterly direction they would probably meet with the South Sea or the Gulf of California (possibly even with the Gulf of Mexico) and not with a new Western Sea such as is to be found on de Lisle's map. No doubt this disappointed him.

On the nineteenth of October the party finally reached a village of the Horse Indians, where they met with news which they believed showed them to be on the right track. The year before a tribe of Snakes had destroyed a large number of the Horse villages and had carried off the young women and sent them to the sea in exchange for horses and merchandise. "It was among the Horse Indians," says the Chevalier, "that I inquired if they knew nations that lived on the sea. They answered me that no one of their nation had ever been there as the road was blocked by the Snakes; but we could meet later some tribes that traded with the white men on the sea, by taking a roundabout course. By means of gifts I persuaded the village to go with me to the Bow Indians, the only nation who are brave enough not to fear the Snakes. They [the Bows] have even made themselves feared by the wisdom and good conduct

of the chief who is their leader. They [the Horse] made me hope that they [the Bows] could give me news of the sea, as they were friendly to the nations who go there to trade.”²⁹

Proceeding still in a southwesterly direction, the Chevalier came at last to the Bow Indians, by whom he was hospitably received. He found little difficulty in learning enough of the Bow dialect to enable him to converse with the chief about his project, and he immediately questioned him regarding the sea. “I asked him,” says the Chevalier, “if he knew the white men of the sea, and if he could lead us to them. He answered: ‘We know them because we have prisoners of the Snake Indians whom we are presently to meet. Do not be surprised if you see so many villages gathered about us. Word has been sent out in all directions enjoining them to meet us. You hear war songs every day, and they are not without purpose: we are going to march in the direction of the great mountains which are near the sea to find the Snakes. Do not fear to come with us as you have nothing to fear, you can see there the sea for which you are looking.’ He continued his discourse thus: ‘The French who are by the sea,’ he told me, ‘are numerous; they have many slaves, which they settle on their lands in every tribe; they have separate lodgings; they [the French] marry them [the slaves] together and do not hold them down. This pleases them so that they do not try to escape.—They [the French] raise a quantity of horses which they use to work their lands.—They have a number of chiefs [officers] for their soldiers and also for purpose of prayer [i.e., priests].’ He [the Bow chief] told me a few words of their language. I saw that he was talking Spanish, and what confirmed my belief was the account he gave of the massacre of the Spaniards who were going to discover the Missouri, an event of which I had heard. All this chilled my eagerness to reach

a known ocean, though I would have liked to go there if it had been possible." From the conversation of the chief the Chevalier's impression that he was headed for a known ocean was confirmed, and this dampened his enthusiasm for he hoped to make the discovery of a sea hitherto unknown. He decided, however, to continue his journey to the ocean since he had already come so far.

The Indians now began their march, and the French joined them in the hopes of being able, if not to reach their goal, at least to come in sight of it. The party travelled sometimes south-southwest, sometimes northwest, until on the first of January they came in sight of the Rocky Mountains. The Chevalier was not eager to take part in a savage warfare in which he had no interest, but the chief of the Bows persuaded him that his desire to hang back from the fight had a bad influence on the tribes, and he therefore requested him to follow, if only as a spectator. Since he had put his hand to the plough, the Chevalier felt the necessity of seeing the enterprise through, especially as it was the only course open to him if he wished to "see the ocean beyond the mountains." In order to move more rapidly the savages now left their women and children encamped and continued with the warriors alone. They soon reached the mountains, probably the eastern projection of the range known as the Bighorns, and here they found the remains of a village of the Snakes from which the occupants had but recently fled in the greatest haste. The sight of this deserted camp filled the Bows with alarm, for they feared the Snakes would turn back by a wide circuit and fall on the camp where they had left their families. In spite of the efforts of the chief, and to the great disgust of the French, the Indians were thrown into a panic and fled post-haste back over the trail along which they had come. There was nothing for the Chevalier to do but follow after them, and he did so, relinquishing

with ill-concealed chagrin all hopes of attaining the goal that was now almost within his grasp. On reaching the village, which they found to be unharmed, the Indians abandoned their warlike enterprise and, striking their tents, returned slowly eastward.

The Chevalier now determined to take his leave of the Bows and hurry on to Fort La Reine. On his way back he stopped for a while with the *Gens de la Petite Cerise*, known to-day as the Arikaras, a people located on the Missouri at the mouth of the Bad River. The French found in the village of these people a man who had been brought up among the Spaniards and spoke their language fluently. This man informed La Verendrye that the route to the Spanish settlements was dangerous owing to the Snake Indians, through whose territory it passed, and that it would take fully three weeks of travel on horseback to reach the Spanish towns. The Indian further said that at three days' journey from the Arikaras he would find a Frenchman who had lived in this locality for several years. The Chevalier would have gone to visit the man had his horses been in good condition, but as they were exhausted with the arduous toil of the previous weeks he was obliged to content himself with writing a letter to the Frenchman urging him to come and visit him, and he decided to await his coming until the end of March. The Frenchman, unfortunately, did not put in an appearance, and on the first of April the Chevalier, taking leave of his savage friends, returned to the Mandans. The second day of July saw the party back again at Fort La Reine, where the elder La Verendrye was awaiting them impatiently.

La Verendrye, this time in the persons of his sons, had come, as was then believed, within striking distance of the Western Sea. He had stood vicariously gazing at the great mountain barrier beyond which lay the mysterious ocean, the subject of so many Indian narratives and the object so ear-

nestly striven for by explorers. The Far West had been penetrated to a point hitherto unknown; the mountain barrier beyond which lay the sea had been reached, and it seemed but a simple matter to make the final effort. Yet, strange to say, the disinterestedness of the explorer and the magnitude of his achievements produced but little impression on the home government, and what little it did make appears to have been unfavourable. Perhaps the repeated failures of his earlier attempts—if we can truly call them failures, since they were efforts to accomplish a task far greater than was suspected—turned the French officials against him, while the work of slander and jealousy filled their minds with unfair prejudices. La Verendrye was keenly sensitive to the malevolent influences about him, which he regarded as being responsible for his failure to receive the promotion he claimed was due him for what he had accomplished. Beauharnois did his best to justify La Verendrye, urging upon the government his extraordinary services and recommending suitable rewards be given him. But the government, after scanning the journal which Beauharnois had forwarded to France, could find nothing satisfactory in its contents and refused to recognise any merit in the exploits of the La Verendrye family. The King through his ministers confirmed the action of Beauharnois in relieving La Verendrye from his command—La Verendrye himself had requested it—and placing the posts in the hands of the Sieur de Noyelle, whose financial backers had offered three thousand *livres per annum* for them; “but,” it was added, “this officer is to work no less sincerely for the discovery than his predecessor,” a somewhat curious commentary for the government to make considering its opinion of the predecessor’s efforts. De Noyelle did no better than La Verendrye and the Court was not long in discovering his

failure. His excuse was the difficulty of obtaining suitable guides to lead him westward.

Beauharnois was recalled in 1745 and the Marquis de La Jonquière appointed in his place. The new governor was provided with a letter of instructions giving him an outline of the situation in regard to La Verendrye and de Noyelle. In this letter the latter was accused of showing less interest in discovery than the former, and it was therefore considered advisable to deprive him of his command. La Jonquière was instructed to order all journals and maps dealing with the discovery to be turned over to him so that after examining them he would be able to give La Verendrye suitable orders for carrying on the work of exploration, for it had been decided to restore the explorer to his former command as he was, no matter what the government might think of him, the man most eminently fitted for the job at hand. He should be advised, so ran the instructions, not to engage in trade exclusively, and warned that he would be deprived of his position in the colony if the King found no more satisfaction than in the past with the manner in which he applied himself to the work of discovery.³⁰ With this damnatory expression of confidence in his virtues as an explorer La Verendrye was obliged to content himself.

La Jonquière on his way to assume his duties in Canada was captured by the English and held by them for such a time as to prevent his reaching his destination until 1749. Meanwhile the Crown appointed the Marquis de La Galissonnière to fill the interim. La Galissonnière was favourably impressed with La Verendrye and befriended him to the extent of pleading his cause with the Minister. "It seems to me," he wrote, "that what has been told you about the Sieur de La Verendrye, namely, that he worked more for his own interests than for discovery is very false, and moreover all

the officers that might be employed in such a discovery will always be obliged to devote a part of their energy to trade so long as the King does not furnish them with others means of subsistence, which perhaps would not be suitable; but it is not a good way of encouraging them by reproaching them with a few meagre profits, or to delay them advance allowance under this pretext as the *Sieur de La Verendrye* has had happen to him. These discoveries cause great expenses and expose one to greater fatigues and dangers than open wars.”³¹ This bold justification, written by one whose recent arrival exonerated him from the charge of partiality to the subject of his correspondence, had the desired effect, and *La Verendrye*, despite the grumblings of the Minister of Colonies, who still maintained that he had abused his position to engage in trade, received the cross of the Order of St. Louis. Encouraged by this mark of royal favour he left Quebec in June, 1748, for his last attempt to find the Western Sea; but his death the following year cut short the project.

The efforts of *La Verendrye* and his sons to discover the Western Sea and unfold the mystery of the Northwest rank as one of the great achievements of Canadian exploration. The difficulties which these men were obliged to overcome were not only the obstacles which Nature frequently places in the path of those seeking to wrest her secrets from her, but were also the hindrances caused by the jealousy and persecution of their fellow countrymen, who, not content with the evil they could do them in Canada, must needs carry their slander to Court and thus deprive them of the financial assistance they needed. *La Verendrye's* problems resemble closely those with which *La Salle* had been obliged to deal seventy years before: both men were seeking a western ocean; both were obliged to face the hostility of their fellow Canadians and the indifference of the home government; but both

were, fortunately, befriended by able and public-spirited governors who pleaded their cause at Court and shielded them as much as possible from the peculations of the envious. Yet in spite of the magnitude of his labours the results of La Verendrye's undertakings were not, from a geographical point of view, so great as might be expected from the amount of trouble expended in obtaining them. Together with his sons he had discovered Lake Winnipeg and the Saskatchewan flowing into it, and also the overland route to the Rocky Mountains. But did this add much to what was already known from the reports of Indian travellers? We have shown repeatedly from a wide range of sources that the French had long understood that the Missouri and other rivers rose in mountains situated far to the west, beyond which—and presumably not far from them—lay the sea. The La Verendryes had seen those mountains, thus confirming what was already known, but beyond this they could prove nothing, and the account they brought home of the sea and the Spaniards dwelling on its shores was but an old, old story. Their work consisted chiefly in verifying the general geographical knowledge and rectifying its details. The discoveries of La Verendrye as they were understood in his day are carefully sketched in the *Carte Physique* of Philippe Buache, a chart which combines the facts known from the personal observations of the explorer and his sons with the investigations of Noel Jeremie.

The work of the La Verendryes gave rise to speculations as to the proper route to the sea, some of which were new, others but elaborations of the old. As an example of these speculations we cite the conclusions of Father Castel, a Jesuit deeply impressed by the creditable achievements of his Order in the development of American geography, and one who had made a considerable study of the subject and was anxious to have some member reap the glory of discovering the route

to the Western Sea. He was a man greatly interested in scientific matters; and the part played by the Jesuits in the world of science had led him to suggest a plan of founding a Jesuit bureau of mathematics, astronomy and geography. In outlining his plan of reaching the sea he favours a more northerly course than had been attempted before. The English, he points out, have but recently been obliged to turn back from their efforts in the northern part of Hudson Bay,³² and from this he believes that the passage by sea is extremely doubtful. As for a connection between Baffin's Bay and the Pacific he considers it to be as fabulous as La Hontan's River. Yet whatever may be the merits of the Northwest Passage its discovery must be left to the English; the route for the French is overland. Castel thought the continent had a greater width than was accorded it by popular belief. The Western Ocean, he said, should not be far from the sources of the Missouri or the Mississippi or from Lake Superior. His scheme was to strike overland from the St. Lawrence Basin, leaving Lake Superior on the left and Hudson Bay on the right, somewhat after the manner of Father Bobé's sixth route, taking three or four hundred men who would establish posts every ten or twelve leagues beginning with Lake Superior, and thus form a chain of halting places along the way. Castel criticises previous expeditions as being launched too far to the south, in a latitude where the ocean is distant six or eight hundred leagues from Quebec and is occupied along its shores by the Spaniards. To go by a more northerly route would be to reduce the distance and also enable the French to intercept the English should the latter find a water passage. If there is no through water passage, but an isthmus is found to extend across the waters between Asia and America, then the isthmus can be fortified and the English held at bay. His entire theory hinges on whether or not there is a sea between the Pacific and Hudson Bay, that is a

Western Sea, and he urges Father Bonnecamp, to whom he is writing, to make diligent inquiries about it as nothing will help the French cause more than this.³³

Father Castel's correspondent did not entirely agree with him, nor did Father Coquart—who accompanied La Verendrye—another priest with whom Castel discussed the project. Coquart tells of his own experience in going to Lake Winnipeg by way of Rainy Lake and Lake of the Woods, and suggests abandoning the route by Fort La Reine on the Assiniboine and going up the Missouri to its source in the mountains, whence one could reach the great lake beyond them. By exploring all the rivers connected with this lake one would be sure to find one leading to the sea, or meet Indians who could tell of its whereabouts. He considers Castel's plan of going overland in the northern territory to be impractical because of the intervening lakes and mountains.³⁴ Father Bonnecamp seconds Coquart's views, but his outlook for the possibilities of making such a voyage is disheartening. It would be difficult, he reasons, to find people to undertake it; scientists would not care to make the journey because of the hardships it would involve; merchants were no longer interested as they felt that commerce with the Far East by such a route was too expensive; and lastly the Jesuits, who have done yeoman's service in the work of exploration, were no longer fashionable. Castel, in spite of these suggestions, held to his original theory and insisted that the Western Sea must lie just beyond the mountains which Coquart saw forty leagues beyond Fort La Reine, and that this sea connects with the Sea of California. The route up the Missouri, he admits, would lead to the South Sea, but it is much longer than the one he advocates. The western mountain chain, he argues, is an extension of the one in South America, and since the great rivers there run eastward and the small ones westward, the same conditions must prevail on the northern

continent, that is, the distance between the sea and the mountains on the western side of the range must be comparatively short.³⁵

The death of La Verendrye did not bring the course of exploration to an end. Governor La Jonquière and the intendant, Bigot, still showed a desire to complete the work for which La Verendrye had given his life, but it must be admitted that their interest in the Western Ocean was secondary to the desire they had of enriching themselves by the fur trade. The rights which the La Verendrye brothers had acquired in the Northwest were taken from them and given to an able officer named Legardeur de Saint-Pierre to whom the work of exploration was now intrusted. Simultaneously the Sieur de Marin, who had strongly recommended the establishment of a post among the Sioux as a base for further discovery, was ordered to go to the source of the Mississippi to find the height of land, that is, the Rocky Mountains, and see if there was not some river beyond it leading to the Western Sea.

Saint-Pierre left Montreal in June, 1750, and journeyed to Michilimackinac and thence to the fort on Rainy Lake. Here he gathered the savages about him and did all in his power to persuade them to maintain peace with the Sioux, pointing out that the governor had sent the Sieur Marin to establish himself among the latter in order that he might lead them into the paths of peace. His efforts, however, were unavailing, for when he reached Fort La Reine he found the Indians preparing for war. Provisions were now beginning to fail, and in order to relieve the demand on his rapidly diminishing supply he sent his ensign, de Niverville, with a detachment to the fort on the Saskatchewan where, it was hoped, he could eke out a living. Meanwhile, Saint-Pierre occupied himself with efforts to pacify the savages as the first necessary step in pushing forward his discoveries. In this he met with considerable success. He informed the

Indians that de Niverville had been sent to found a post three hundred leagues up the Saskatchewan, and he urged the tribes to join him there that they might be of assistance to him in penetrating still farther into the continent. "Having resolved to push forward my discoveries," he says, "I had only to fear of ending up in the direction of Hudson Bay, which I intend to avoid by going westward to find the sources of the Missouri, in the hope they will lead me to some rivers which have their courses across the territory into which I am trying to penetrate further, because of the difficulty of transporting munitions and supplies indispensable for such an enterprise. This makes me feel that the projects of M. de La Verendrye were not very solid since it is impossible to succeed by any other route than the Missouri by which one would come to join some civilised nation, but it would be none other than the Spaniards, whose settlements are perhaps not unknown."³⁶

De Niverville arrived at the Saskatchewan. He sent forward in May, 1751, a detachment of men which ascended the river as far as the Rocky Mountains where they built a fort, called La Jonquière by Saint-Pierre. This was located, according to a modern scholar, on the south branch of the Saskatchewan near the confluence of the Bow and Belly Rivers.³⁷ Saint-Pierre determined in the fall of 1751 to join de Niverville, but as difficulties broke out among the savages he was obliged to forego this undertaking; in lieu of this he ferreted out an Indian chief and questioned him as to the possibility of finding a river to the north that would lead west instead of to Hudson Bay. The savage told him of a nation, often visited by the Snakes, which was composed of men of a darker complexion than the French. These men dealt in merchandise similar to that obtained in Canada. The route taken to this nation was about west-northwest. Saint-Pierre, dangling a handsome reward before the savage's eyes,

induced him to go to this nation with a letter for the commander of the post, for he felt very certain that there was a civilised people living somewhere in this direction. But trouble now broke out with the Indians, and Saint-Pierre felt it wise to abandon his post and return east. He was met at the Grand Portage, at the mouth of the Pigeon River, by de Niverville who gave him a complete account of his experiences on the Saskatchewan. Saint-Pierre learned that de Niverville's party on its return from the Rockies had brought back an account of a nation of European traders dwelling in the Far West, which bore out, in his opinion, the story told him by the Indian chief. Saint-Pierre, however, sensed the impossibility of communicating with this nation owing to the hostility of the savages, whose unfriendly attitude, he believed, was due to the prompting of English traders at Hudson Bay; and so long as trade existed between the natives and the English he could see no hope of finding the Western Sea.

With Saint-Pierre's voyage ends the efforts of the French to solve the mystery of the sea. Within a short time after his return to Montreal the Canadians found themselves engaged in that final struggle for the domination of the North American Continent which brought their vast territory under British rule. After the capture of Canada by the English the principal posts on the Great Lakes remained as they had been before, but those in the Northwest, so laboriously founded by La Verendrye, were burned or suffered to fall into decay.

CHAPTER IX

THE FINAL DASH THROUGH HUDSON BAY

The Hudson's Bay Company.—Its obligation to search for a passage.—Early voyages.—The story of Bartholomew de Fonte.—Arthur Dobbs supports de Fonte's claim.—He accuses the Hudson's Bay Company of lack of interest in the passage.—He rouses public interest.—He sends Christopher Middleton to attempt the discovery.—Middleton's voyage.—Dobbs is dissatisfied with Middleton's report.—Accuses Middleton of dishonest conduct.—Dispatches second expedition.—Wager River explored.—Impossibility of finding a passage finally admitted.—Journey of Samuel Hearne to the mouth of the Coppermine River.

AFTER the unsuccessful attempts of Captains Foxe and James to discover a northwest passage through Hudson Bay in 1631, interest in the possibilities of such a passage remained dormant for many years. The friction between Charles I and Parliament, the Civil Wars, and the Protectorate of Cromwell caused too violent a commotion in England to permit of any attention being paid to an enterprise whose result was now considered extremely doubtful. The bay had been explored on its western side; the route through Davis Strait and Baffin's Bay had also been tested; and navigators had penetrated through the opening known as Fox Channel and reported, "no thoroughfare." Yet belief in a passage through Hudson Bay still lingered, thanks to the narrative of Foxe, who in spite of his failure, retained his faith in the existence of a strait, because of the tidal observations made by him and his predecessors, which, he said, showed a current that could only be accounted for by the presence of open water to the west.

The Restoration under Charles II had, as we have pointed

out, brought in its train a group of adventurous men who were ready to take up any project that smacked of excitement. Under the energetic Prince Rupert the Hudson's Bay Company was chartered for the purpose of developing the fur trade, and also with the object of seeking a passage to the Western Sea. The King mentioned the latter in the body of the charter. "Whereas," runs the document, "our entirely beloved cousin, Prince Rupert [and his associates] . . . have, at their own great cost, and charges, undertaken an expedition for Hudson's Bay in the northwest part of America, for the discovery of a new passage into the South Sea,¹ and for the finding of some trade for furs, minerals, and other considerable commodities, and by such their undertaking have already made such discoveries as to encourage them to proceed further in pursuance of their said design, by means whereof there may probably arise very great advantages to us and our kingdom."² Therefore the King grants his entirely beloved cousin the sole right to trade in all waters connected with Hudson Strait and on the rivers and lakes draining into them." The Hudson's Bay Company, however, had by this charter obligated itself after a fashion to keep up a search for the Northwest Passage, since the patent was granted in consideration of the attempt made in that direction. This does not appear from the charter to have been in any sense the main object of the enterprise, nor is it likely that either the King or the incorporators of the company regarded it as anything but a minor issue. The primary purpose of the company was, it must be admitted, to make money, for it was a business undertaking; and so when generous profits began to roll in from the fur trade it seemed foolish to the directors to finance a project whose outcome, even if favourable, would probably yield but mediocre returns. In short the position of the Hudson's Bay Company was similar to that of the India Company in Louisiana; it

was a business corporation, not a society for geographical research.

The company, unfortunately, did not display through its local factors any great amount of energy in exploring the vast territory that had been granted it. Forts were erected along the shores of Hudson Bay at the mouths of the principal rivers by which the Indians could have easy access to them when they brought down their furs to trade. The agents of the company seldom pushed inland to enlarge their business, but seemed content to purchase what was brought in to them. Interest in exploration was at a standstill. But later, when the eighteenth century was well under way, the company roused itself from its lethargy and dispatched vessels from time to time for the purpose of ascertaining the location of a passage; yet there seems to have been a lack of sufficient driving force behind these expeditions to bring them into prominence, for we find but few references to them.

In dealing with these voyages little information can be given about them, as they played but a minor part in the affairs of the company, and their only result was to convince the directors more conclusively of the impossibility of the venture. As early as 1715 Indians from the far north brought to the factory at the mouth of the Churchill River a few pieces of copper. They also told of a great river which imagination magnified into a strait. Four years later the company fitted out a sloop called the *Discovery* under Captain Vaughan, and a ship named the *Albany* under Captain Barlow, and placed them under the command of James Knight, the man who made the first settlement on the Churchill River. The purpose of this expedition is explicitly set forth in the instructions given to Knight by the officers of the company. "You are, with the first opportunity of wind and weather," they said, "to depart from Gravesend on your intended voyage, and by God's permission, to find out the

Straits of Anian, in order to discover gold and other valuable commodities to the northward.”³ Knight left Gravesend in accordance with his instructions in 1719 and sailed to Hudson Bay fully confident of success, for he carried with him iron-bound chests to hold the gold dust and other valuables he might find. When neither of the vessels returned the following year the company became alarmed and issued orders to John Scroggs to take the sloop, *Whale-Bone*, and set out in search of them. The orders reached Scroggs late in the season, so it was not until 1722 that he was able to set out on his relief expedition. He accomplished nothing and was back in a few weeks. Strange to say the rumour spread that Barlow and Vaughan had found the passage and had sailed successfully to China. Years passed, then a whaling expedition, cruising off Marble Island in the northern part of the bay, found the remains of two ships which upon examination proved to be those of the vessels that had sailed under Knight.

Scroggs on his voyage sailed to latitude 62° where his crew went ashore and traded with the Indians. Thence he went northward to $64^{\circ} 56'$ and anchored within three leagues of the shore in Roe's Welcome off a promontory he named Whalebone Point. He found here a tide of five fathoms and he also saw numerous black whales, indications, according to current belief, of an opening to the Western Ocean. The land from Whalebone Point fell off to the south of west, and the men he sent ashore reported that they saw nothing to prevent their going farther in this direction. The land as seen from a mountain-top gave the impression that a momentous discovery was at hand.⁴ Another expedition is found to have taken place in 1719 under Captain Kelsey and John Hancock, commanding the *Prosperous* and *Success* respectively, which vessels sailed from Prince of Wales Fort on the Churchill River for a short cruise north-

ward. Thus matters stood when Arthur Dobbs threw open the question of the Northwest Passage; but before taking up his work it is necessary to give an account of a fictitious discovery of the passage by the Spaniards, which had such a strong influence over Dobbs and the geographers of the mid-eighteenth century period.

There appeared in the *Monthly Miscellany* of April and June, 1708, a letter purporting to have been written by a Spanish naval officer, named Bartholomew de Fonte, giving a succinct account of his discovery of the passage from the Pacific side in 1640. This letter excited no attention at the time of its publication, for there was then no interest in the passage, so it was obliged to await the coming of Dobbs before it could get serious consideration. Many at the time regarded it as a forgery and the entire account embodied in it as a myth. The length of time intervening between the date of the letter, 1640, and its publication in English is accounted for by Thomas Jefferys, who made a careful examination of all the known facts he could gather about Admiral de Fonte's voyage, by the theory that the object of the expedition was to intercept the English whom the Spanish feared were about to attempt the passage, and that a statement to this effect, if offered in explanation of the undertaking, might give offence to Great Britain; hence, Jefferys concluded, the letter was not made public. When, after the lapse of years, it was brought to light and translated into English the Spaniards had lost interest in the passage and offered no objections to its publication.⁵

According to the letter the viceroys of New Spain and Peru had received word that a voyage in search of the Northwest Passage was about to be undertaken by some Englishmen of Boston, and in order to forestall such an expedition they ordered Admiral de Fonte to take command of four vessels and go in search of the strait from the western side

of America. De Fonte set sail from Callao on April 3, 1640, having under his command Diego Pennelossa, Pedro de Bernarda and Philip de Ronquillo. The fleet sailed up the coast until it came to a gulf about two hundred leagues above Cape Blanco, which trended eastward into the land, and heading up into this the ships continued for a distance of two hundred and sixty leagues, threading their way through an archipelago called St. Lazarus, until at the head of the gulf they anchored off the Rio Los Reyes. On arriving here de Fonte sent Pedro de Bernarda up a "fair river," called Rio de Haro, first north and northwest then north and northeast until he came to a lake full of islands which he named Velasco. Leaving the ship in this lake Bernarda took some large Indian canoes and sailed one hundred and forty leagues west and four hundred and thirty-six east-northeast until he reached the seventy-seventh parallel after entering the Tartarian Sea.

De Fonte, meanwhile, turned his attention to Rio Los Reyes, sailing up its waters to a lake called Lake Belle, where he received a letter from Bernarda telling of his adventures. De Fonte continued in a northeasterly direction and found at the other end of Lake Belle a river he named the Parmentiers which led him, after passing several cataracts, to another lake, and this de Fonte named after himself. It was one hundred and sixty leagues long and sixty broad and ran in its length from east-northeast to west-southwest. Proceeding out of this lake still in a northeasterly direction, de Fonte went through a passage he named the Strait of Ronquillo in ten hours, and came to the open sea. Sailing a little way in this sea he presently came upon a ship on which he found an elderly man and a youth. "The man," says de Fonte, "was the greatest man in the mechanical parts of the mathematics that I have ever met with: my second mate was an Englishman, an excellent seaman, as was my gunner, who

had been taken prisoner at Campeachy, as well as the master's son; they told me the ship was of New England from a town called Boston. The owner and the whole ship's company came on board the 30th [of July], and the navigator of the ship Captain Shapley, told me, his owner was a fine gentleman, and major-general of the largest colony in New England, called Massachusetts; so I received him like a gentleman, and told him, my commission was to make a prize of any people seeking a northwest passage into the South Sea, but I would look upon them as merchants trading with the natives for beavers, etc." ⁶ De Fonte obtained several charts from Captain Shapley and sent a cask of wine to the owner of the vessel, Mr. Gibbons. This done de Fonte turned back. He had now discovered the Atlantic, for the presence of an English vessel coming from New England was sufficient proof that he had reached a branch of that ocean. Returning to Lake Belle he received a second letter from Captain Bernarda which he says, "did assure me there was no communication out of the Spanish or Atlantic Sea, by Davis Strait; for the natives had conducted one of his seamen to the head of Davis Strait; which terminated in a fresh [water] lake of about thirty miles in circumference, in the 80th degree of north latitude; and that there was prodigious mountains north of it, besides [to] the northwest from that lake, the ice was so fixed, that from the shore to one hundred fathom [of] water, [it had been there] for aught he knew from the Creation." De Fonte's work done he set out for home, but he closes his letter with the statement that he had found "no passage into the South Sea by that they call the Northwest Passage."

It was on the report which Admiral de Fonte made of his voyage that Arthur Dobbs and Thomas Jefferys constructed their thesis of the Northwest Passage. This would at first appear incongruous, as de Fonte himself is careful to point

out the absence of a strait, at least one that would give unimpeded navigation. His captain, Bernarda, stated unequivocally that he had found land stretching between the northern sea he had discovered and Davis Strait, while the river Parmentiers, down which de Fonte had sailed, was broken by cataracts. A glance at de Lisle's *Carte Generale*, however, shows Lake de Fonte identified with the Lake Michinipi of Nicolas Jeremie, which de Lisle connects by the Strait of Ronquillo with the Wager River, an inlet on the western shore of Roe's Welcome.

Dobbs, to explain the existence of a passage in the face of de Fonte's assertion to the contrary, argues thus after quoting the admiral's letter *in extenso*: "It is plain that there is a navigable passage from Hudson's Bay to California, and tho' it has not had justice done to it in the translation, and probably has not been exactly copied or printed; yet, giving an allowance for errors of that kind, and it has throughout the air of truth. . . . As to his [de Fonte's] saying there was no passage, although he met the Boston ship, I take his meaning to be, that either Bernarda found no passage by the northwest of Davis's Straits, the way probably the Spaniards expected it; or that by his passing up one river to Lake Belle, and down another to Lake de Fonte, by what he calls sharps or falls, he apprehended there was no navigable passage for ships the way he went, or he desired to disguise it, to prevent other Europeans from attempting it to his country's prejudice, and therefore he did not publish his chart which he refers to in his letter." ⁷ The cataracts in the Parmentiers River Dobbs considers merely as tide rips caused by the ebb and flow of the current, which could form no obstruction to continuous navigation from one sea to another. Moreover, Dobbs reasoned that the region south of Lake Belle was an island, and that the Rio Los Reyes, Lake Belle and Lake Velasco were not in the American Continent, but were located

in a land separated from North America by a passage which de Fonte had missed on his journey up the coast; for according to Dobbs the land at Cape Blanco falls away in a northeasterly direction and does not extend northwest as the admiral would have us believe. An illustration of this theory may be seen on Jefferys's map, where a separate passage is shown south of the concatenation of lakes and rivers connecting the Pacific with the Strait of Ronquillo, thus giving access to the Atlantic. This passage bears an inscription stating that it is intended for the strait through which Juan de Fuca passed, for Jefferys believed de Fuca had reached the Atlantic, and he gives a different interpretation to the story than the one found on de Lisle's chart.

As a check on de Fonte's account of his meeting with the venerable New Englander, Jefferys offers a passage from Cotton Mather's *Magnalia Christi* telling of one Major Gibbons who "bound from Boston to some other parts of America" fell into a calm of such lengthy duration that he ran short of provisions and was on the verge of starvation when he fell in with a French pirate who supplied him with enough food to enable him to continue his voyage.⁸ With the aid of a little imagination Jefferys distorts the incidents mentioned by Mather to make them bear out de Fonte's story, though the discrepancies are so great as to render the attempt obvious. After Gibbons's death, says Jefferys, his family moved to Bermuda. Long afterwards an elderly woman living in Boston was said to have told how Gibbons had gone in search of a route to the East Indies, but had been turned back by ice and snow. Nothing more is known of this expedition.

The voyage of de Fonte has long ago been discredited. A more thorough knowledge of geography has, of course, proved its impossibility, but there is always the possibility of a voyage by de Fonte along the Pacific Coast, and he might

have been misled into the honest belief that he had found a passage, by a journey up the modern strait of Juan de Fuca or through the Channel east of Vancouver Island. This phase of the problem has been carefully examined, however, and the entire story is now rejected by scholars who regard it as an invention of one James Petiver, a contributor to the *Monthly Miscellany*. Petiver's reasons for publishing such a fabrication are unknown.⁹ De Fonte's story had considerable influence on those interested in the Northwest Passage. It was reprinted by Arthur Dobbs, and relied on by him to a certain extent as one of the proofs of a passage; and it is to Dobbs, despite the false foundation on which he built his theory, that all credit should be given for awakening interest in the fascinating problem which had lain dormant for so many years.

Arthur Dobbs was an Irish engineer appointed in 1730 as engineer-in-chief and surveyor-general of Ireland by Robert Walpole. Besides discharging his duties in this capacity he had a profound interest in projects for improving the utility of the American colonies in such a way as to increase their trade with Great Britain. He was also interested in the Northwest Passage as a means of increasing the commerce of England and her colonies. After the treaty of Utrecht an era of peace prevailed among the nations of Europe which permitted England to pursue her business interests without fear of interruption, and greatly facilitated the Hudson's Bay Company in the development of its trade, for the treaty decided once for all that the Hudson Bay region belonged to England and not to France. During this period of prosperity the stock of the company, or better, the greater part of it, was gathered into the hands of a few individuals who, satisfied with the generous dividends that were paid regularly, could not be induced to venture into exploration of the unknown. Dobbs felt keenly the indolent

part played by British adventurers in the Canadian Northwest and set himself to the task of rousing ambition, if not among the stockholders, at any rate among the English public. For this purpose he gathered considerable information regarding the resources of Canada, especially of the regions recently obtained by England, from such records as those of Jeremie and a Canadian *voyageur* named Joseph La France. From the latter he gained a knowledge of what lay northwest of Lake Superior, that is, in the Hudson's Bay Company's territory, for La France had travelled in the region and had learned much about it from the Indians. Dobbs also sought to stir the adventurous spirit of the English by recounting the exploits of the famous British navigators who had sought the passage. He began his active operations by an attack on the company, accusing it of refusing for selfish reasons to push out in search of the strait, despite the implied promise to do so found in the charter. "The company," he wrote, "avoid all they can making discoveries to the northward of the Churchill [River], or extending their trade that way, for fear they should discover a passage to the Western Ocean of America, and tempt, by that means, the rest of the English merchants to lay open their trade, which they know they have no legal right to [do], which, if the passage was found, would not only animate the rest of the merchants to pursue the trade through that passage, but also to find out the great advantages that might be made of the trade of the rivers and countries adjoining the bay, by which means they would lose their beloved monopoly. . . . But tho' they are fully informed of a fine copper mine on a navigable arm of the sea north-westward of Whale Cove [west side of bay, $62^{\circ} 30'$], and the Indians have offered to carry their sloops to it, yet their fear of discovering the passage puts bounds to their avarice, and prevents their going to the mine, which by all accounts is very rich; yet those who

have been at Whale Cove own, that from thence northwards is all broken land, and that after passing some islands, they from the hills see the sea open, leading westward; and the Indians who have been often at the mine say, it is upon a navigable arm of the sea of great depth, leading to the south-west, where are great numbers of large black fish spouting water, which confirms the opinion, that all the whales seen betwixt Whale Cove and Wager River, all come there from the Western Ocean, since none are seen anywhere else, in Hudson's Bay or Strait."

Dobbs's reasons for wishing to find the strait were primarily that the English might derive the benefit which he believed would accrue to their trade from a wider and more diversified market, both for the purchase of foreign goods and the sale of domestic manufactures. The Hudson's Bay Company, during its many years of existence, had been of little benefit to the public, for the company's factors consumed but a small portion of English manufactures. Further, the company used but few vessels, and consequently employed but a limited number of seamen, so that the enterprise did not serve as well as it might the national demand for increasing the British mercantile marine. Since the bay had been ceded to England it followed, according to Dobbs, that she would have a legal right to exclude the French from the benefits of the passage, if one could be found in that locality; and by virtue of priority of discovery she would have the right to the strait against the Dutch, Swedes and Danes, besides the opportunity of settling in the most convenient harbours on the other side of the continent. "Besides," he reasons, "by the unaccountable behaviour of the Hudson's Bay Company, the government and parliament have just and legal right to lay open that trade to all the merchants in Britain, as it is at present a monopoly granted only by charter from King Charles II, without any act of parliament for it."

This is a somewhat specious reasoning to bring forth at this late date, and Dobbs, it must be admitted, does not rely very strongly on it, for he continues his argument by saying that the Company's right, if it ever had any, was now forfeited because the directors had made but little effort to discover the passage, an undertaking which was specifically embodied in the charter and made a condition of the grant. "This they have not only neglected to do," he goes on to say, "but have concealed the knowledge, or presumptions they had of it, as much as possible; and have not only chican'd when applied to, but have actually, by letter from their governor, refused to look for it, when applied to upon that account, and have also discouraged the attempts of others, not only by concealing the navigation into those seas, [but] by obliging their captains, under a penalty, not to make or publish any charts or journals of those seas and coasts or voyages thither." Dobbs had in view the establishment of trade with the Spanish provinces of the Pacific: Mexico, Guatemala, Peru, and Chile; and further, the passage besides opening up such commerce in time of peace would enable the English men-of-war to commit depredations on their erstwhile customers in time of war. On the other hand there would be easy communication with China and Japan where there was a great demand for furs. It was the old idea of a short cut to the Far East, which had originated in England in the time of Cabot, now rising up again in the eighteenth century to spur men on to find the Northwest Passage.

Yet there were those who did not believe in the passage. Indeed, when we consider the vast amount of labour spent on finding it during the reigns of Elizabeth and James I, it is a wonder that any one could be found who still believed in its existence. Certainly the Hudson's Bay Company, despite the judgments passed on its motives for refusing to concern itself with the project any further, considered the

idea to be purely chimerical, or at any rate worthless for practical purposes even if a passage could be found. It was also suggested that the Spaniards had put forth the strait as a lure by means of false sea charts and the fable of Juan de Fuca to keep the English and Dutch seamen busy in the north, and prevent them from encroaching on the Spanish possessions in the south.¹⁰ The argument about the existence of the passage waxed hot. Dobbs, eager to prove his point, aired his views in an *Abstract of Discoveries* which was submitted in 1731 to Colonel Bladen, the most energetic and influential member of the Board of Trade, in the hope of inducing the South Sea Company, then conducting whaling operations in Davis Strait, to take up the project of discovery. Dobbs was at that time ignorant of the extent of the Hudson's Bay Company's privileges in the northern regions, but when informed of the true state of affairs he laid the matter before Admiral Sir Charles Wager in 1735 in the hope of getting some modification of the monopoly that would enable others to make an attempt in this direction, since the company had wilfully failed through neglect of its obligations. The public sided with Dobbs in his attacks on the company, not because his arguments were sound, for as a matter of fact they were not, but because the company was rich and powerful. The corporation made a pretence of complying with the popular demand, and sent out two years later the *Churchill* under James Napper and the *Musquash* under Robert Crow. This expedition journeyed up the western shore of the bay to latitude $62^{\circ} 15'$ where it found but little of value. It returned after a few weeks.¹¹

Nothing daunted Dobbs now took up the work in earnest. He collected as much information on the subject as he could without going to the bay himself, and he secured the services of Captain Christopher Middleton, a man who had made a great number of voyages to the bay and might be con-

sidered able to find the strait if it could be found at all. Middleton himself believed in the passage. He had accompanied Scroggs on the voyage of 1722, and when the ship was anchored in Roe's Welcome, latitude 65° , he concluded from the tide he noticed there and from the general appearance of the shoreline that there must be a passage in this neighbourhood. Furthermore, the Indians who came to Fort Churchill when he resided there told him of a European nation on the west side of America, information which encouraged his belief that the two seas must meet.¹² Middleton was also satisfactory to Dobbs because he shared the latter's views regarding the attitude of the Hudson's Bay Company towards exploration in this direction; indeed he corroborated it, for he speaks of the company's censorship of the diaries kept by those who had travelled in these regions. Writing in 1737 he says: "The company think it their interest, rather to prevent than forward new discoveries in that part of the world; and for that reason they won't suffer any of our journals to be made public. All the intimation I am able to give is, that the tides rise more with a north and northwest wind, at neap tides, than ever the spring tides do at Churchill and Albany, with a southerly or easterly wind; and as there is little or no tide between Mansfield and Cary's Swan's Nest, nor any in the north, or northwest of Mill Isles, in that bay, it must come from the Welcome, which cannot be far from some western ocean."¹⁸ Such views could not but impress Dobbs with the high qualities of his captain, so he hastened to recommend him to the admiralty.

The project backed by Dobbs was an independent one, but the Hudson's Bay Company showed its good will by writing its agents at Fort Churchill to render all possible assistance to Middleton, should he be in distress. The captain was ordered by the Admiralty to take command of the *Furnace* and *Discovery*, the latter a vessel under William Moor, and

make his way into Roe's Welcome as far as the sixty-fifth parallel. Here he was to try the passage at Whalebone Point, which he had noticed on a previous voyage to this region; and if, after doubling the cape, he should find open sea, he was to hug the American shore and work his way down the western side of the continent as far as he thought proper.¹⁴

Middleton sailed in the spring of 1741, passing through Hudson Strait to Cary's Swan's Nest, where a council was held on the first of August to discuss the advisability of continuing the voyage that year, as the season was well spent for these latitudes. It was decided after due deliberation to go to the Churchill River where the fleet could winter and be in a position to get an early start the following spring. This was accordingly done. After the winter had spent its force, and the ice had sufficiently melted to permit navigation, the ships left Fort Churchill and made their way northward to Roe's Welcome, where, hugging the western shore, they passed above Whalebone Point to a headland which Middleton named Cape Dobbs, and which proved to be the entrance to a deep bay extending far to the westward. This he called the Wager River. Here the party spent three weeks exploring the bay, but finding it to be in reality a river and not a passage, and moreover being fearful of becoming hemmed in by ice, they took the first opportunity to escape from the gulf and to continue their northward course in Roe's Welcome. Encouraged in their search by a strong flood tide coming from the northeast they sailed on as high as $66^{\circ} 40'$ where they at last found themselves embayed. Landing on the eastern shore of the Welcome Middleton marched inland to a high mountain, from the summit of which he could see both ends of a strait leading from the Welcome to Fox Channel, it being about twenty leagues long; but as it was completely frozen over it was impossible to force a passage

through it. Middleton had now reached the northernmost point of Roe's Welcome at a spot he called Repulse Bay. Finding the road blocked against further progress he concluded, rightfully enough, that he had done his duty to his backers, and he thereupon turned his vessels southward with a clear conscience. Sailing back through Hudson Strait he presently reached England.

Dobbs, on receiving Middleton's report, was disappointed in the results of the voyage, though at first he felt no dissatisfaction at the way in which it had been conducted; but he had set his heart on the discovery; and his belief in the existence of a passage in the region to which he had sent Middleton was so strong that after perusing the abstract of his captain's journal he became suspicious and wrote him requesting additional information. Middleton replied in a letter explaining fully the points raised by Dobbs, and showing the care he had taken in the search. "Undoubtedly," he wrote to Dobbs, "there is no hope of a passage to encourage any further trial between Churchill [River] and so far as we have gone; and if there be any further to the northward, it must be impossible for the ice, and the narrowness of any such outlet, in 67° or 68° of latitude, it cannot be clear of ice one week in a year, and many years, as I apprehend, not clear at all."¹⁵ Dobbs was apparently pleased with his captain's explanation for he wrote him on the fourteenth of December (1742) expressing himself as being satisfied that there was no passage by sea. He would, therefore, turn his attention to the land west of Hudson Bay with the object of encouraging settlements along the banks of the great rivers flowing into the bay. For this purpose he was compiling information on the geography and conditions of the western country, and he requested Middleton to assist him in the work by contributing his knowledge of those regions; then perhaps, he suggests, "we might gain a com-



THEODORE S. DRAGE. MAP PUBLISHED IN HIS *An Account of a Voyage for a Discovery of a North West Passage.* 1748.

munication with the nations upon the Western Sea, which may be of advantage, tho' nothing so great as if the discovery had been made by sea." Middleton, in his reply, showed no sympathy for this scheme, as the climate about Hudson Bay was much colder than Dobbs imagined. Europeans, he knew, would find it impossible to live there, or at any rate to compete with the half-breed Canadians who had become acclimated and inured to the hardships of the forest.

Meanwhile Dobbs had received Middleton's journal. From a perusal of it he satisfied himself that the Wager River was no river at all but the passage he was seeking. This, of course, Middleton denied. The question was argued back and forth with the usual result in such cases. Presently a rumour was spread abroad that Middleton was in the pay of the Hudson's Bay Company and had deliberately played his backers false by refusing to explore the Wager River when he felt it would lead to a passage to the Western Sea. An anonymous letter reached Dobbs in January, 1743, which runs as follows: "This script is only to open your eyes, which have been sealed or closed with too much (we cannot say cunning) artifice, so as they have not been able to discover our discoverer's [Middleton's] pranks. All nature cries aloud that there is a passage, and we are sure there is one from Hudson's Bay to Japan. Send a letter directed to Messieurs Brook and Cobham, who are gentlemen who have been [on] the voyage and cannot bear so glorious an attempt, should die under the hands of mercenary wretches, and they will give you such pungent reasons as will awaken all your industry. They desire it may be kept secret so long as they shall think fit; they are willing to venture their lives, their fortunes their all, in another attempt; and they are no inconsiderable persons, but such as have had it much at heart ever since they saw the rapidity of tides in the Welcome. The frozen straits is all chimera, and everything you have yet

read or seen concerning that part of our voyage.”¹⁶ How much Dobbs was impressed by this communication it is impossible to say. It probably confirmed his worst suspicions, for he had already formed a somewhat unfavourable opinion of Middleton’s doings, though at first he did not charge him with bad faith.

Middleton, on the other hand, to prove his point, brought forward a number of depositions from members of his crew, varying in detail but alike in tenor, the burden of which was to show the impossibility of a passage through the Wager River, because the fresh water found in its upper reaches indicated it to be a river flowing from the land and not an open strait. Dobbs countered these arguments by quotations from reports he had received, showing a different point of view. As an example of this we find a report by Lieutenant John Rankin, dated July 27, 1742, telling of the observations he had made when sent by the captain to explore the Wager River. From this account we infer that Rankin found nothing to support the theory of a passage, but Dobbs gives an entirely different version of the report, or better he published a letter of the same date which he had received from Rankin in which the lieutenant stated that he believed the Wager to be an opening to the Western Sea. Rankin found, according to this epistle, a great depth of water in the Wager as far as he was able to ascend it, a condition indicating, in his opinion, the presence of a through passage, and he also observed whales coming from a westerly direction. On landing he climbed a high mountain situated near the shore and saw “a fair channel or strait to the northwards of the islands, with lands on both sides, as high as the Cape of Good Hope, running away to the westward, with many bluff points and broken lands.”

Dobbs, in summing up his evidence, accuses Middleton of falsifying his journal of the expedition and altering his

charts in such a manner as to cast a veil over the true condition of the regions he had explored, for the purpose of throwing other explorers off the scent. Dobbs further accuses the Hudson's Bay Company of playing a sinister part in the business, for Middleton admitted having been offered a bribe of £5000 by the same company if he would return to its service and abandon the voyage, or at least sail to Davis Strait or in some direction other than the one in which he was desired to go. Hence it was, reasoned Dobbs, that Middleton in his first communication with him on his return to England sent a letter telling of his voyage, but omitting everything that might be construed as disclosing the discovery of a passage, and mentioning only the difficulties which had impeded him in the Wager River and Roe's Welcome. When the complete journal was delivered to him Dobbs found many statements indicating, in his opinion, the existence of a passage. "I could almost prove," he writes excitedly, "that he [Middleton] was in the passage, and that Wager River was a strait, and no river; and the way he entered the strait was one, tho' not the greatest and easiest into the strait: for I must conclude that the whales seen there came from the Western Ocean, as far as they could, until the ice stopped them, which [ice] was forced in from the Welcome; and that the whales at Brook Cobham,¹⁸ having no ice there to prevent their getting into that part of the bay, they had got through the strait from the Western Ocean by a better and easier passage to the southward." In addition to this Middleton is accused of boasting to the company's agent at Fort Churchill, in the presence of his officers, "that he should be able to make that voyage, and none on board [save] him should know whether there was a passage or not; and he would be a better friend to the company than ever." And with this reputed intention he started up the coast, sailing along rapidly without stopping to investigate the possibilities

of the shoreline until he reached the Wager. As further evidence of his bad faith he was said to have berated those who suggested a passage through this river, threatening violence to any who concerned themselves with the purpose of the voyage, and forbidding any one to keep a private diary of the expedition.

Viewing the entire controversy from a distance we cannot help sympathising with Captain Middleton for the manner in which he was treated by those who agreed with Dobbs. Dobbs was no doubt sincere and felt a keen disappointment at the result, not wholly unmixed, perhaps, with a touch of the wounded vanity of a man who has confidently predicted the successful outcome of a movement he has set under way. The accusations of dishonesty which he levelled at his captain irritate us because of their apparent unfairness and the flimsy evidence upon which they are built. Middleton had been offered a bribe, according to his own admission, says Dobbs; but, had he taken it? His subsequent actions would incline us to answer in the negative, for he sailed in the direction in which he was ordered to proceed, and not to Davis Strait as was suggested by the company. His attempt was a failure as the company wished it to be; but this was inevitable in the nature of things, for Dobbs had sent forth the expedition to accomplish the impossible. No doubt there were some among the crew who questioned their commander's judgment, and these men managed to get Dobbs's ear and the public ear too, for the public was jealous of the company's success, and would rejoice to see any undertaking succeed which was opposed by that corporation. The upshot of the whole proceeding was to confirm Dobbs and his friends more firmly in their opinions; and so certain were they of Middleton's duplicity that they did not hesitate to set on foot another expedition to search for the Western Sea in the same

locality where Middleton had failed. In this undertaking they had the backing of public opinion.

The enthusiasm aroused in England by Dobbs's scheme originated more from a desire to open trade with the Far East through the passage than from a wish to add to geographical knowledge. The discovery of a route to Asia would promote trade with Asiatic countries, which in turn would stimulate manufactures, add vessels to the merchant fleet, offer employment to the working classes, and in general extend its benevolent influence through all the ramifications of the business world. The list of subscribers to the enterprise contains but a few names of noble origin; the far greater part of the adventurers were drawn from the mercantile class. In this respect there was a marked contrast to the group which formed the membership of the Northwest Company of 1612.

Dobbs set the ball rolling by presenting a petition to the King in 1744, requesting his Majesty to give orders to prepare two vessels for discovering a passage through Hudson Bay. Impressed by the arguments of Dobbs the government not only acceded to his request, but voted a reward of twenty thousand pounds, a large sum in those days, to be paid the adventurers in case the attempt succeeded. Encouraged by this munificence the promoters opened a subscription for raising ten thousand pounds to defray the costs of the expedition. This sum was divided into one hundred shares of one hundred pounds each. A committee was appointed to handle the business, and they purchased for the voyage a vessel of one hundred and eighty tons, called the *Dobbs-Galley*, and one of one hundred and forty, called the *California*. Each vessel was repaired and put in condition for what was expected to be a long and arduous undertaking. Provisions, military and naval stores, and presents for the natives were stowed away on board in sufficient quantities for

the purpose and of as good a quality as could be procured. So thorough was the work of preparation that the committee spent more than the sum allotted for the voyage, but so great was the feeling of enthusiasm that those in charge of the work made up the deficit from their own pockets. The *Dobbs-Galley* was placed under the command of William Moor, and the *California* under that of Francis Smith. The Admiralty, which had always favoured the expedition and had given it all possible encouragement, granted protection for three years to those embarking in the vessels. Rewards were offered in case of success; the captain was to receive five hundred pounds, the mates two hundred, and the others compensations suitable to their respective ranks. Never before had so much care been bestowed on an expedition of this nature.

The instructions issued to the commanders ordered them to sail southward of Cape Farewell in Greenland, then through Hudson Strait to Cary's Swan's Nest, where the vessels were to meet, if by chance they had become separated during the voyage across the Atlantic. At this point, if both vessels had come together, thorough observations should be taken of the height and velocity of the tide, otherwise the ships are to meet at some other locality, preferably the Wager River. Here the great attempt to find the passage is to be made by working westward through the narrow part of the bay; and then "upon getting into an open sea," run the instructions in telling of the course to be pursued after passing through the narrow portion, "you may depend upon an open passage, and boldly proceed southwesterly, or more southerly or westerly, as the land may lie, keeping the American land in view to the larboard [left]; and in case afterwards of coming into any opening, with land in view on both sides, then you must carefully observe the tide, whether you meet it, or the flood follows you in, that you may know

whether you are embayed, or whether it be a passage thro' broken lands or islands, and proceed accordingly, or return and keep more westerly. If you find a southwest tide of flood, after passing as far as 62° north latitude beyond Wager Strait, then you may be sure you have passed the most northerly cape of the northwest continent of America, and may boldly sail to any warm latitude southward of 50° to winter in, making careful observation of rocks, shoals, etc., in your passage, fixing the latitudes of all headlands in your charts, and the computed longitudes, according to the parallel you are in." ¹⁹ The same course is to be observed in case an attempt is made to go through Pistol Bay or Rankin's Inlet, south of the Wager River.

These instructions are of the same general tenor as those given to Captain Middleton three years before, though they have a greater abundance of detail. Great stress is laid upon the desirability of avoiding all hostilities with the Indians and with the civilised inhabitants of the western coast, should any be found. Care is to be taken not to give offence to the latter by taking formal possession of their land without their explicit consent. Under no circumstances should an attack be made upon any people, unless it is absolutely necessary for self-defence, and then the locality where the conflict takes place is to be avoided in the future. Above all, every effort is to be made to cultivate the friendship of the Indians.

It would appear from these instructions that little reliance was placed on the long passage described in de Fonte's letter, for the explorers seemed to expect to find the open sea a short way from the narrow passage in the Wager River. Dobbs's map shows this very plainly, as he places the western coast of America very near Hudson Bay; in fact, the shoreline curves eastward to meet Rankin's Inlet; and even as far south as Cape Blanco its distance from Lake Michigan is not great. Henry Ellis, who accompanied the expedition

and wrote its narrative, does, it is true, show the de Fonte myth on the map published in his book, but it is doubtful if he expected the passage in the western part of Hudson Bay to connect with the de Fonte strait, for his account of the voyage makes no mention of this strait, but refers always to the proximity of the Western Sea.

The vessels left Yarmouth on the last day of May, 1746, in company with four ships of the Hudson's Bay Company. By the eleventh of August they were well up in Roe's Welcome and made land on the western side in latitude 64° . Heavy weather prevented the party from going ashore, and a strong gale springing up from the northward forced them south as far as Marble Island. Here they came to anchor and sent out the long boats to "procure a knowledge of the time, direction, velocity, and height of the tides, and to observe every other circumstance, that might furnish any lights towards the discovery of a passage." The result was a report showing the existence of several openings in the shore west of the island where the flood tide rising to a height of several feet came down from the northeast. The season was now too far advanced to permit further exploration, so the officers in council agreed to winter at Port Nelson. They proceeded there without stopping to examine the shore along which they were obliged to coast. The ships were anchored for the winter in the mouth of the Hayes River, for the members of the party were given to understand that their presence at Fort Nelson would be unwelcome.

The following June the vessels left their anchorage in the Hayes and started northward on the voyage of discovery. When they reached Sentry Island, an island located in latitude $61^{\circ} 40'$, the captain ordered a small boat, which the crews had made during the winter by lengthening the long boat, to be brought alongside the *Dobbs-Galley*. This little ship was called the *Resolution*. Being now loaded with pro-

visions, it was placed under the command of Captain Moor and was dispatched to examine the coast. Henry Ellis was one of those who sailed on the little vessel. The *Dobbs-Galley* and *California* proceeded to Marble Island, where they were to await the return of the *Resolution*. Moor with his command, the *Resolution*, sailed northward to Knights Island, near the sixty-second parallel, where he saw to the westward a large opening in the coastline. Large pieces of ice drifting across the mouth of the opening twice prevented his entering this bay, and so continuing northward he presently came to an inlet which he called Neville's Bay, and which proved upon examination to be a part of the gulf whose opening he had attempted to enter a few miles to the south. This conformation of the coast is accounted for by the presence of an island called Sir Biby's, situated in such a position as to have the appearance of covering the entrance of the gulf, and thus giving two passages to it, one at each end of the island. Thinking there was nothing further to be gained by continuing the investigation in this direction, Moor kept on until he reached a bay which he named Corbet's Inlet in latitude $62^{\circ} 47'$. This he did not enter because he saw the flood tide coming in from the eastward, a clear indication, in his opinion, that the passage was not to be found there, and also because he saw the end of the bay. Returning now to Marble Island, he rejoined the *Dobbs-Galley*.

On reaching this vessel he learned that Captain Smith had sent two of his mates to examine Rankin's Inlet, about four leagues westward, from which large pieces of ice had been coming and driving down upon the *Dobbs*. The officers sailed about the inlet for some thirty leagues on different courses and came back to report the absence of a passage, for they found the inlet to end in a bay. The same day that Moor returned to the *Dobbs-Galley* Captain Smith of the *California* had sent his longboat to explore the coast

between Cape Jalabert in latitude $63^{\circ} 15'$ and Cape Fullerton, one degree farther north. On the fourteenth of July the *Dobbs-Galley* and the *California* weighed anchor and sailed northward, after the *Resolution* had been sent out to make the same tour that had been proposed for the *California's* longboat. After sailing four or five days the leaders became uneasy for the boats and determined to part company, the *Dobbs-Galley* continuing northward, while her consort went back to find them. But time was pressing, as the season for discovery was wearing away; there was little time to waste in searching for the boats. A flagpole was therefore erected on the shore near Cape Fry, beneath which a letter containing instructions for a rendezvous was buried in case the boats should pass that way unnoticed by those on board the vessels. The *Dobbs-Galley* now hastened northward as far as 65° . She presently returned to Cape Fry, where, to the great joy of the crew, they found the *California* awaiting them with the two boats. The officers on board reported that they had found an inlet (known to-day as Chesterfield Inlet) in latitude 64° , which was three or four leagues wide at the entrance. This they had entered, and sailing north-northwest for eight leagues found the width to increase perceptibly, then continuing in a westerly direction, for the shoreline turned as they went farther up, they found the bay to grow gradually narrower until it was but four leagues wide, though beyond this point they could perceive that it grew wider again. But they were deterred from going any farther as they found the water becoming fresh. "It is highly probable," reasons Ellis, "that this inlet may have some communication with a great lake within land, which may perhaps have another outlet of the like nature, into the great Western Ocean; and one circumstance which they took notice of in running up it, gives great weight to this conjecture. This circumstance was, that the stream of

ebb runs faster by one-half, than in the Thames, for ten hours in twelve, tho' it was upwards of twelve miles broad, and for the last two hours the flood caused the water to stand still." The presence of fresh water does not seem to Ellis convincing evidence against a passage, for he cites the conditions on the west coast of Africa where, during the rainy season, the rivers pour vast quantities of fresh water into the sea; nor does he consider a flood tide from the east to disprove absolutely the existence of a strait. But the leaders of the expedition had more pressing business at hand than experimenting with Chesterfield Inlet, for they were now approaching the Wager River, or as it was then called, Wager Strait.

This body of water lies in latitude $65^{\circ} 30'$. Cape Dobbs marks the southern entrance of the inlet at a point where it is broad, but as one goes westward the gulf gradually narrows until it is but five miles across, at which place the tide runs at a high rate of speed, eight or nine miles an hour at the spring tides, so Ellis tells us. West of this the inlet widens again into a vast bay, on the northern shore of which are Savage Sound, Deer Sound and Douglas Harbor. On the southern side of the bay, at its western extremity, one finds the Wager River proper falling into the inlet over a fall.

The vessels entered Wager Strait and, skirting the northern shore, presently came to anchor in Douglas Harbor. Here on the thirtieth of July a council was held to deliberate on the course to be pursued. The resolution adopted was somewhat drastic. The council resolved to dispatch the following day the ships' boats to find the passage, leaving the vessels themselves in the harbour, where they were to await the return of the boats until the twenty-fifth of August, then, if these did not arrive, the ships were to return to England, letting the boats shift for themselves as best they

could. Accordingly the captains of the *Dobbs-Galley* and the *California* set sail the next day with the boats and, propelled by a moderate gale, steered northwest by west until the gulf diminished in breadth from ten leagues to one. It was now night, and the travellers were suddenly aware of a loud noise resembling the roar of a great cataract, but they could not then discover its origin. When daylight came they hurried ashore and found the cause of the disturbance. A strong tide was rushing through a passage about sixty yards wide, and so great was the volume of water forced through this opening that it produced a noise like a rapid.

The party had now reached a point one hundred and fifty miles from the entrance to Wager Strait and found to their great delight that the water was still salt. Says Ellis: "As we saw clearly that the strait opened beyond this fall, to five or six miles wide and ran to the westward, we were still in hopes of a passage. The great difficulty now was to pass the fall, which, when attempted, proved not either so hard, or so hazardous, as from the first view we apprehended; for I passed it with a little boat, when it was in its full fury. . . . On the second of August we passed the fall, above which the tide rose only four feet, but the shores were very steep on both sides, and no ground was to be felt with a line on one hundred and forty fathom. There still appeared seals and white whales, but notwithstanding this, most of our company were not a little discouraged by their finding the water almost fresh upon the surface. But it being my opinion, that this freshness was only on the surface, I resolved to make an experiment whether the thing was so or not; and for that purpose let down a bottle strongly corked, to a depth of thirty fathoms, where the cork was forced in, and the bottle came up full of water, of the same degree of saltness with that in the Atlantic Ocean; which revived our hopes, as suddenly as they were sunk before." But their joy was

short-lived, for two days later, after they had gone on a short distance, they saw from the top of a hill that their supposed strait ended in two small unnavigable rivers, one of which came from a lake a few miles to the southwest. Yet Ellis philosophically consoled himself with the remark that "every promising opening, fairly and fully searched, and that search clearly and candidly recorded, lessens the difficulty of the enterprise, and reduces the great question of a passage, or no passage, so much nearer to a certainty."

On returning to the vessels a council was immediately held to decide on the next move. The two commanders were satisfied from the information gathered that there was no possibility of a passage; but Ellis and Edward Thompson, the surgeon, felt that the two boats on their return did not keep near enough the northern shore to make a complete observation of what lay in that direction, particularly as they had discerned large breaks in the mountain range along the coast. Moreover, the rise and fall of the tide increased as one went westward, a phenomenon which, in their opinion, could only be accounted for by the existence of an opening to the west. In order to satisfy Ellis and Thompson the council agreed to send the *Resolution* to investigate the northern shore. In addition to this Ellis suggested sending the *California* on this expedition while the *Dobbs-Galley* should sail up Roe's Welcome to Repulse Bay, where, he believed, a passage could be found; for, as he pointed out, the tides were higher in that locality than in Wager Strait and the water salty and transparent at great depths. But his colleagues declined to entertain the proposal because their instructions, so they felt, did not warrant them in taking such a step. It was therefore decided to explore the north side of Wager Strait only. On the thirteenth of August Ellis and Thompson took a boat and put the plan into execution. They were gone but two days, for they soon perceived that they were shut in by land to

the westward in such a manner as to preclude any possibility of a passage in this locality.

Returning to the ships, they presented their report to a council specially called to receive it, and at this meeting Ellis seized the opportunity to urge his former scheme of sailing northward to Repulse Bay, adding new arguments which had occurred to him in the meanwhile. The project was vetoed then as it had been before, but as the season was not yet spent, it was considered advisable to attempt a further solution of the problem before returning to England. The council therefore passed the following resolution: "After a very accurate search of the opening, commonly called Wager River or Strait, we find it entirely shut up from having any communication with any place but the Welcome, of which from the extraordinary tides, greatness of its extent, depth, and saltness of its water even fifty leagues from its entrance, we determined it to be an arm thereof; yet finding the tides to rise a great height on the west coast of the Welcome, but more especially here, . . . we have found the flood to set the course of the coast from the northward and northwest winds to make the highest tides, now being desirous to know whence the main tide comes, we conceive a knowledge of its direction on the east side of the Welcome, would be conducive thereto; it is resolved (wind and weather permitting) that trial be made at the low breach nearly opposite this place, as also at Cary's Swan's Nest, and all other places that may furnish any light towards the discovery of a North-west Passage." The ships accordingly made their way out of the Wager and crossed the Welcome to its eastern shore. Here at a low breach observations were made of the tides, which were found to flow from the northward and to rise fifteen feet. This survey was considered sufficient. The officers of the expedition, now feeling that they had accomplished all that could be expected of them, sailed past Cary's

Swan's Nest without stopping, and in due time the vessels reached England.

The failure of the expedition should, so one would imagine, have extinguished all hope of finding the Northwest Passage. Baffin had explored the northern bay that bears his name, Foxe had penetrated his channel to a point where ice impeded further navigation, Middleton had gone northward to Repulse Bay, where he was obliged to turn back, and now the western openings, particularly the promising one of Wager Strait, had been explored and found to lead nowhere. Yet despite these setbacks there were still some who refused to consider the matter finally settled. To these Ellis held out a ray of hope. The arguments he advances are naïve, one might almost say childish, in the light of modern knowledge. The distance from Hudson Bay to the Western Sea must be short, so reasons Ellis, because in all narrow peninsulas there is a dearth of large trees, the arboreal vegetation consisting principally of shrubs. This condition, as he points out, exists in the region about Wager Strait, hence the land must be a narrow peninsula formed by the close proximity of the Western Sea to Hudson Bay. Further, he had observed a "dusty kind of snow" brought in by the northwest wind, which sort of snow came from the steam arising from open water, and this water could not be far distant to the west. Then, too, there was a ridge of mountains gradually arising from the east to an apex, whence the land again sloped off towards the west, a condition similar to that on the isthmus of Panama. "But after all that has been said," concludes Ellis wisely, "it must be allowed, that if our conjectures were ever so true, they would amount to no more than affording a probable proof of this country's having a sea on both sides, and making nothing for a passage, from one sea to the other, which is what we are principally concerned about."

Having uttered these words of wisdom, Ellis goes on to prove the existence of a strait somewhere in the vicinity of the places he has explored. This he does by an analysis of the tides. The tide of an inland sea like the Mediterranean, he explains, is comparatively slight, it comes in by a narrow strait and loses its force in spreading itself over the broad surface of the sea. Hudson Bay is similar to the Mediterranean, that is, it offers a broad expanse connected with the ocean by a comparatively narrow channel. But, unlike the Mediterranean, its tides, particularly in the regions surveyed by Ellis, are very high, a phenomenon which could not take place without a connection with the Western Sea that would admit a flow of water from a source much nearer than the Atlantic. True, some believed in a strait connecting Baffin's Bay with Hudson Bay, but this had never been satisfactorily proved, and even if one existed, the tide entering Hudson Bay by such a roundabout course from the Atlantic would be insufficient to account for the disturbances noticed in Roe's Welcome. In addition to this, his chief argument, Ellis advances three minor ones: the clearness of the water in the Welcome, a condition which could not exist if there were no communication with the ocean, for the discharge of the affluent rivers would alter the character of the water; the strong current in the Welcome which keeps the northern portion free from ice; and lastly, the presence of whales which are inclined to seek a warmer climate in winter, and are evidently accustomed to pass into the Western Sea at this point. In concluding, Ellis favours Chesterfield Inlet or Repulse Bay as the possible openings for a passage.

Belief in the Northwest Passage was not killed by the voyage of the *Dobbs-Galley* and the *California*, nor would it have been even if Ellis had not held out some hope of finding an opening through Repulse Bay or Chesterfield Inlet. The belief had taken deep root in the minds of many Eng-

lishmen, and repeated failures to find the strait not only were unable to eradicate it, but seemed to make the believers more stubborn in their opinion. A copy of Ellis's book which has come into our hands bears marginal notes by a former owner setting forth all the data in behalf of the existence of a strait, and interpreting numerous passages in the text to confirm this opinion. The pugnacious Dobbs, it is true, expressed himself as satisfied with the efforts of his undertaking, which in a manner vindicated Captain Middleton, and from that time forth turned his attention to other affairs. Thomas Jefferys then took up the cudgels in defence of the passage and spun an elaborate theory in its behalf. The old belief that Asia and America were continuous, he says, had finally been exploded by the discoveries of the Russians. Thus the old accounts of a passage, which most geographers had abandoned as fabulous, might be revived or at least be re-examined in a more friendly light, as it was but reasonable to suppose that since a strait actually existed some one might have passed through it, and the obscure stories of the past might well contain a certain amount of truth. He points to the weakness of the claim made by some persons who put forth the statements of Indians denying the existence of a strait so far south as to have its western terminus in latitude 51° , for these Indians are themselves strangers to these parts. Thus Jefferys clears the way for an acceptance of de Fonte's narrative, which, together with the account we have of Juan de Fuca's expedition, is the chief bit of evidence he produces to prove his point. The former voyage he analyses at great length, carefully going over every foot of the way and illustrating his conception of the story on his accompanying map. It is certain, he feels, that there is a great channel to the west of Hudson Bay similar to Hudson Strait in the east. He admits the weight of the evidence produced by recent explorations showing the ab-

sence of a strait through the western side of the bay or through Repulse Bay, hence, he reasons, the channel must be to the west and south. Yet he is reluctant to abandon the possibility of access to the Western Sea or rather the Pacific Ocean from the bay, for although he shows on his map de Fuca's strait connecting with the waters of Baffin's Bay and separated from Hudson Bay by a narrow neck of land, this neck bears the inscription: "Land thro' which an inlet is supposed to pass."

In summing up the stories of the passage that have been accumulated during the past two centuries, Jefferys says: "It hath been shown to have been the constant opinion of there being a northwest passage, from the time soon after which the South Sea was discovered near the western part of America, and that this opinion was adopted by the greatest men not only in the time they lived, but whose eminence and great abilities are revered by the present age. That there is a sea to westward of Hudson's Bay there hath been given the concurrent testimony of the Indians; and of navigators and Indians that there is a strait which unites such sea with the Western Ocean." ²⁰ Jefferys having to his mind proved his point by the testimony of navigators and Indians, then refutes the objections raised by those who would disprove it and who offered as evidence the absence of a tide from the west. He does this by showing that such people are arguing only from the truth of a system on which they have pinned their faith, but a system has nothing to do with the actual existence of a passage. In other words, it exists or does not exist, irrespective of any theory. His map, says Jefferys, is designed to show, in addition to the route described by de Fonte, the strait of de Fuca leading to the sea back of Hudson Bay, and connecting with that bay either by an inlet or by Repulse Bay. While he is willing to submit to correction in the matter of detail, he repudiates any

idea of a categorical denial of the passage from the data then at any one's disposal. Yet he realises the great difficulties in the way of a solution of the problem, and he feels that the government is hardly warranted in taxing the country for an expensive project whose outcome is doubtful. "To make an expedition to discover whether there is a passage by those parts which remain unsearched purposely from England," Jefferys says, "is what I think an honest, disinterested, or impartial person cannot recommend, as such expeditions might be repeated with great expense, and the event uncertain. The government gave their assistance, and the generosity of the merchants hath been sufficiently experienced, both in England and America; therefore it becomes every one whose intention it is solely that such a beneficial service should be done to avoid proposing what might, in consequence, be an unnecessary expense to government, and abuse the generosity of the merchants."

The days of finding a northwest passage in order to facilitate trade with the East were now passing, for even Jefferys, one of the last to maintain the feasibility of the project, admits the inadvisability of requesting the government to shoulder the burden of exploration, or of requesting the merchants to furnish financial backing for a scheme the returns from which were, to say the least, doubtful. It must be evident by now even to the most sanguine that the passage, though it might be found, would prove worthless for purposes of trade; the short season of the northern latitudes, the ice and the intense cold, were factors now too well known to be explained away by the fabulous narratives of Juan de Fuca and Admiral de Fonte. If these were the conditions to be faced in the openings found on the western coast of Hudson Bay, what might not be experienced in the way of obstacles if the route led farther north? The expedition of the *Dobbs-Galley* was the last attempt to force a

passage through the western side of Hudson Bay and the last effort to find a strait in the north for commercial purposes. Although the search for the Northwest Passage as an attempt to solve a geographical puzzle continued until the middle of the nineteenth century, when Lieutenant McClure, after incredible hardships, traced a continuous waterway from the Pacific to the Atlantic, the lure of Eastern commerce, the prime motive during the period we have surveyed, died with the eighteenth century. But before bringing our story to a close we shall give a brief account of the voyage of Samuel Hearne, which put an end to all hopes of an opening through Hudson Bay and silenced the fictitious accounts of de Fonte and de Fuca on which Jefferys and his contemporaries placed so much reliance.

We mentioned earlier in this chapter the reports of copper deposits and the story of a great river which the northern Indians brought in to the factory on the Churchill River. These reports now began to multiply so rapidly that in 1768 Norton, the governor of this outpost, felt it advisable to write the company about them, as they might be worthy of serious consideration. He recommended an overland journey to the mouth of the river in question in order to expand the company's trade, and as the river was said to flow in a northerly direction the discovery of its mouth would compel the exploring party to cross any strait that might connect the Pacific with Hudson Bay or the waters north of it.²¹ The committee representing the company was so far impressed with Norton's suggestions as to appoint Samuel Hearne to lead such an expedition. Under orders of the directors Norton drew up a set of instructions for Hearne in which the discovery of a passage was by no means slighted. The principal object of the expedition, however, was to find the river abounding in copper, known to-day as the Coppermine, and trace it to its mouth in the northern ocean, and

there to determine the latitude and longitude of the place. Failing this, Hearne was to examine the headwaters of Wager Strait or Chesterfield Inlet. "Another material point which is recommended to you," says Norton, speaking of the strait, "is to find out, if you can, either by your own travels, or by information from the Indians, whether there is a passage through this continent. It will be very useful to clear up this point, if possible, in order to prevent farther doubts from arising hereafter respecting a passage out of Hudson's Bay into the Western Ocean, as hath lately been represented by the *American Traveller*." ²² Norton in this matter was but the mouthpiece of the company and the instructions he gave were but the carrying out of their views. Copper was of course the principal object of the expedition, but doubtless it would be desirable for the company to have their agent, while he was in the northern region, clear up the mystery of the passage and settle this question once and for all.

Hearne left the Churchill River in November, 1769, accompanied by Indian guides in whom he unfortunately placed too much reliance, and also by a few Englishmen. The savages after they had proceeded about two hundred miles abandoned the English and left them to make their way back to Fort Prince of Wales at the mouth of the Churchill as best they could. The following year Hearne again started for the Coppermine, this time taking none of his fellow countrymen with him, but using Indian guides exclusively. By the middle of August he realised that this his second attempt must be a failure, so he determined to return to the fort and make a fresh start under more favourable conditions. During his journey he had met an Indian chief named Matonabee, who explained to him that his failure was due to the dishonesty of his guides and to his omitting to take with him a suitable number of squaws

who were relied on by the Indians to do the menial work of these expeditions and help carry the necessary supplies. Hearne, therefore, resolved to make a third attempt. He left Prince of Wales Fort on December 7, 1770, and journeyed slowly in a northwesterly direction to Clowey, where he met a large band of Indians. His rate of travel so far had been slow, for it was winter, but when spring had come it was possible to proceed with more speed. To make the final dash the party rid themselves of women, children, dogs and heavy baggage, and pushing on with all possible haste reached the Coppermine on the thirteenth of July. The rest of the journey proved easy, for the river was not a long one and five days later they reached its mouth in the Arctic Ocean.

The details of Hearne's journey do not interest us as his narrative deals principally with other subjects than geography; we are concerned with it solely because of its connection with the Northwest Passage. The mouth of the Coppermine is located near the sixty-eighth degree of latitude—Hearne erroneously places it at $71^{\circ} 54'$ —and on the one hundred and fifteenth meridian west of Greenwich. A glance at Jefferys's map will show the significance of this.²³ By marking a spot on this chart where the sixty-eighth parallel crosses the ninety-seventh meridian—Jefferys reckons his longitude from the island of Ferro, not from Greenwich, hence the correction—one sees that it falls west of the strait of Juan de Fuca and the chain of lakes and rivers supposedly discovered by de Fonte, that is, in the body of water which Jefferys calls a part of the Tartarian Sea. Since Hearne had crossed the intervening territory between that point and the mouth of the Churchill without encountering any strait, or for that matter any water other than small lakes and rivers, the entire theory of a passage in this portion of the American Continent was finally dis-

proved. Hearne himself emphasises this point in his narrative by saying in concluding his journal of the voyage: "Though my discoveries are not likely to prove of any material advantage to the nation at large, or indeed to the Hudson's Bay Company, yet I have the pleasure to think I have fully complied with the orders of my masters, and that it has put a final end to all disputes concerning a Northwest Passage through Hudson's Bay. It will also wipe off, in some measure, the ill-grounded and unjust aspersions of Dobbs, Ellis, Robson, and the *American Traveller*; who have all taken much pains to condemn the conduct of the Hudson's Bay Company, as being averse from discoveries, and from enlarging their trade."

Never did explorer give a more just summary of his achievements. Hearne had disproved the existence of the passage, at least in the accessible position where eager geographers had placed it, and he had done nothing more. After the publication of his journal in 1795 the straits of de Fonte and Juan de Fuca disappear from maps of North America. As though to clinch the matter and to discourage any further attempts to find the strait near Hudson Bay, Hearne shows the great width of the continent in these northern latitudes and the folly of placing the Pacific at a few days' journey from the bay. "This, however," he says, referring to the close proximity of the two bodies of water, "is so far from being the case, that when I was at my greatest western distance, upward of five hundred miles from Prince of Wales's Fort, the natives, my guides, well knew no end to the land in that direction; nor have I met with any Indians, either northern or southern that ever had seen the sea to the westward. . . . I have seen several Indians who have been so far west as to cross the top of that immense chain of mountains which run from north to south of the continent of America. Beyond those mountains all rivers run to the westward."

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NOTES

INTRODUCTION

¹ E. P. Cheyney, *European Background of American History*, 1904, pp. 15-16.

² *Ibid.*, pp. 22-26; and A. H. Lybyer, *Ottoman Turks and Routes of Oriental Trade*, in *English Historical Review*, 1915, Vol. XXX, p. 578.

³ C. R. Beazley, *Dawn of Modern Geography*, III, pp. 474-477.

⁴ W. C. Webster, *General Hist. of Commerce*, p. 57.

⁵ Lybyer, *Ibid.*, p. 587.

⁶ *Ibid.*, pp. 580-581.

⁷ Henry Yule, *Cathay and the Way Thither*, 1866, I, p. 123.

⁸ C. R. Beazley, *Texts and Versions of Carpini and Rubruquis*, 1903, p. 116.

⁹ W. W. Rockhill, *The Journey of William of Rubruck* [Rubruquis], 1900, p. 155, footnote.

¹⁰ The miles referred to here are Italian miles of about 4,500 feet.

¹¹ Thomas Wright, *Travels of Marco Polo*, a revised translation of Marsden, 1904, p. 139.

¹² *Ibid.*, pp. 292-293. This sum equals \$42,000,000 with an aggregate for the two sums of \$58,000,000.

¹³ A country south of Cathay.

¹⁴ Henri Cordier, *Book of Ser Marco Polo*, 1903, I, pp. 129-130.

¹⁵ Beazley, *Dawn of Mod. Geo.*, III, p. 310 *et seq.*

¹⁶ *Ibid.*, pp. 215-235. For discussion of Henry's desire to find the kingdom of Prester John, see Henry Vignaud, *Histoire Critique de la Grande Entreprise de Christophe Colomb*, I, p. 195 *et seq.*

¹⁷ Samuel Purchas, *His Pilgrimes*, 1906, XI, p. 188.

¹⁸ Beazley, *Ibid.*, pp. 421-422. For copy of the Laurentian Portolano see p. 422.

¹⁹ Beazley, *Prince Henry the Navigator*, 1895, p. 158.

²⁰ Vignaud, *Ibid.*, p. 195, claims that Henry was not searching for a route to India, but was interested in establishing Christianity in Africa and especially in learning the location of the kingdom of Prester John, which kingdom was then believed to be somewhere in Ethiopia. The Indies he wished to discover were those of Prester John (p. 213). This search lasted until 1486. It was only after the voyages of Diaz and Covillan that the East Indies were sought.

CHAPTER I

¹ J. A. Williamson, *Maritime Enterprise*, p. 19.

² W. S. Lindsay, *Hist. of Merchant Shipping*, II, p. 50.

³ Henry Harrisse, *Discovery of North America*, p. 659.

⁴ Letter of July 25, 1498. *C.S.P. Spanish*, I, p. 177.

⁵ Letter of Soncino to the Duke of Milan, Dec. 18, 1497, in H. P. Biggar, *Precursors of Jacques Cartier*, p. 20.

⁶ G. E. Weare, *Cabot's Disc. of North America*, pp. 97-100, gives patent.

⁷ Letter of March 28, 1496, *C.S.P. Spanish*, I, p. 89.

⁸ Harrisse, *Ibid.* See map showing route opp. p. 8.

⁹ Letter of Pasqualigo to his brothers, Aug. 23, 1497, *C.S.P. Venetian*, I, p. 262.

¹⁰ Letter of Soncino to Duke of Milan, Aug. 24, 1497, *C.S.P. Venetian*, I, p. 260.

¹¹ This map and globe are no longer in existence.

¹² Letter of Soncino, Dec. 18, 1497, Biggar, *Ibid.*, pp. 19-21.

¹³ This line was drawn north and south, 370 leagues west of the Cape Verde Islands.

¹⁴ Letter of de Puebla to Ferdinand and Isabella July 25 (?), 1498, Williamson, *Ibid.*, p. 159. See also p. 61, copy of a manuscript of unknown authorship.

¹⁵ Letter of Ayala to Ferdinand and Isabella, July 25, 1498, *C.S.P. Spanish*, I, pp. 176-177.

¹⁶ Williamson, *Ibid.*, pp. 104-106.

¹⁷ A. F. Pollard, *Reign of Henry VII*, II, p. 345, gives these entries as taken from the *Excerpta Historica*, pp. 116-133.

¹⁸ For copy of this map see Richard Hakluyt, *Principal Navigations, etc.*, edition of 1903, II, opp. p. 176.

¹⁹ For copy of map, see Winsor, *Narr. & Crit. Hist. of America*, II, p. 108. It may be well to caution the reader at this point, since we must deal with maps and geographical knowledge in general, that the computation of longitude during the sixteenth and seventeenth centuries was an extraordinarily difficult problem, even when attempted by expert mathematicians. Sea captains and explorers scarcely troubled themselves to find it; they relied on latitude and estimated longitude by the number of leagues they had travelled from a given point of departure. It was not until the early part of the eighteenth century, when the chronometer was perfected, that it was possible to ascertain longitude at sea with any degree of accuracy. Hence the surprising location of Newfoundland on Cantino's map, i.e., east of the Line of Demarcation, was not an extraordinary blunder.

²⁰ Quoted from Martyr, 6th chapter of *Decade*, III. Translation in Hakluyt, *Ibid.*, VII, pp. 151-153.

²¹ Ramusio, Vol. I of his *Viaggi* translated in Weare, *Ibid.*, p. 201.

²² Williamson, *Ibid.*, Chap. IV.

²³ Samuel Seyer, *Memoirs of Bristol*, II, p. 208.

²⁴ Harrisse, *Ibid.*, pp. 102-124.

²⁵ Quoted in David MacPherson, *Annals of Commerce*, II, p. 39.

²⁶ The eighth year of Henry's reign would be 1517.

²⁷ Williamson, *Ibid.*, p. 244. For refutations of this voyage see: J. G. Kohl, *Discovery of Maine*, p. 206 *et seq.*, and Henry Harrisse, *John and Sebastian Cabot*, Pt. II, Chap. II.

²⁸ *Wardens Manuscript Accounts of the Drapers Company of London*, VII, folios 86-87. Quoted in Harrisse, *Disc. of N. America*, pp. 747-750.

²⁹ Hakluyt, *Ibid.*, II, p. 162.

³⁰ Robert Thorne's Book, Hakluyt, *Ibid.*, II, p. 166.

³¹ Letter in Purchas, *Ibid.*, XIV, p. 304.

³² Statement made by Navarro in letter of March 11, 1528. Quoted in H. P. Biggar, *Ibid.*, p. 167.

³³ C.S.P. *Spanish*, 1538-1542, pp. 326-327.

³⁴ Letter of Jan. 22, 1518, quoted in J. C. Brevoort, *Notes on Verrazano*. *Journal Amer. Geog. Soc.*, IV, 1872, p. 216.

³⁵ Agreement, Mar. 27, 1523, Biggar, *Ibid.*, pp. 147-148.

³⁶ Peter Martyr, *Decades*, Harrisse, *Ibid.*, p. 233.

³⁷ G. M. Asher, *Henry Hudson*, p. LXXVIII.

³⁸ Dispatch of Apr. 25, 1523, Harrisse, *Ibid.*, p. 223.

³⁹ J. C. Brevoort's articles, *Notes on Giovanni da Verrazano*, published in the *Journal of Amer. Geog. Soc.*, IV, 1872, gives two copies of the map. One shows a reduced facsimile of the *mappamundi*; the other, on a larger scale, the section covered by Verrazano's voyage. On the latter Brevoort has noted that the isthmus in question is probably that of Panama. I cannot agree with this. A glance at the copy of the entire *mappamundi* shows that the designer was too conversant with geographical facts to make such a blunder.

⁴⁰ i.e., the Pacific. Usually this ocean is referred to as the Western Sea, as it is when viewed from Europe, or the South Sea, as when viewed from Panama, where it was first seen.

⁴¹ Verrazano's letter of July 8, 1524, to Francis I. A translation from the original MS. in the Magliabecchian Library at Florence has been made by J. G. Cogswell and may be found in *Coll. N. Y. Hist. Soc.*, 2nd series, Vol. I, 1841. This contains the cosmographical description which is not found in Ramusio's copy translated in Hakluyt.

⁴² H. S. Burrage, *Early English and French Voyages*, p. 18. Cartier's narrative is given in this work. The narrative of the first voyage, while

not in Cartier's handwriting, is, no doubt, his own. J. P. Baxter, *Memoir of Cartier*, pp. 2-3.

⁴³ Christian Le Clercq, *First Establishment of the Faith in New France*, translated by J. G. Shea, I, pp. 57-58.

⁴⁴ *Routier of Allefonsce*, Hakluyt, *Ibid.*, VIII, p. 279.

CHAPTER II

¹ The land west of Cuba refers to the entire American Continent.

² Letter quoted in Pierre Margry, *Les Navigations Françaises*, pp. 207-208.

³ Ramusio, *Ibid.*, 1565, III, Introduction.

⁴ Armand J. Gerson, *Early Hist. of Muscovy Co.*, pp. 2-5, William-son, *Ibid.*, pp. 311-312.

⁵ Cawston and Keane, *Early Chartered Companies*, pp. 32-40.

⁶ Jenkinson to Elizabeth, May 30, 1565. *C.S.P. East Indies, 1513-1616*, pp. 4-5.

⁷ Geo. Best, *Epistle Dedicatory*, 1578, in Richard Collinson, *Three Voyages of Martin Frobisher*, pp. 22-23.

⁸ *A Discovery of Lands beyond the Equinoctial*, Landsdowne MS. C. fol. 142-146. Reprinted in Collinson, *Ibid.*, pp. 4-8.

⁹ Jenkinson to Queen, May 30, 1565. *C.S.P. Ibid.*, p. 5.

¹⁰ Memorial of Gilbert, 1567 (?). *Ibid.*, pp. 6-7.

¹¹ Gilbert's *Discourse*, Hakluyt, *Ibid.*, VII, p. 160.

¹² *Treatise* by Richard Willes. Hakluyt, *Ibid.*, VII, p. 194.

¹³ From the description this cannot be the *mappemonde* of 1544. It is probably a sketch that has been lost.

¹⁴ Document of 1576 (?). *C.S.P. East Indies, 1513-1616*, p. 11.

¹⁵ G. B. Manhart, *English Search for a Northwest Passage*, pp. 31-33.

¹⁶ Lok's Memorial. *C.S.P. East Indies, 1513-1616*, pp. 12-14.

¹⁷ Geo. Best, *A True Discourse*, Hakluyt, *Ibid.*, VII, p. 280, and in Collinson, *Ibid.*, pp. 72-73.

¹⁸ Articles of grant given in Collinson, *Ibid.*, pp. 111-115.

¹⁹ *Instructions to Frobisher*, Col. 39, *Dom. Eliz.*, CXIII, No. 12, given in Collinson, *Ibid.*, pp. 117-120.

²⁰ *Acts of Privy Council. New Series.* X, p. 7.

²¹ Walsingham to Lord Treasurer, Mar. 11, 1578. *C.S.P. East Indies, 1573-1616*, p. 35.

²² Instructions to Frobisher, Collinson, *Ibid.*, p. 214.

²³ Thos. Rundall, *Narratives of Voyages towards the Northwest*, 1849, pp. 32-34.

²⁴ *C.S.P. West Indies, 1675-1676. Addenda, 1574-1674*, pp. 2-3.

²⁵ W. S. W. Vaux, *World Encompassed*, compiled from Fletcher's notes, pp. 111-112.

- ²⁶ Ribaut's expedition will be dicussed in a later chapter.
²⁷ J. W. Jones, Hakluyt, *Divers Voyages*, 1582, *Epistle Dedicatorie*.
²⁸ Hakluyt, *Discourse on Western Planting*, 1584. Published by Leonard Woods in *Doc. Hist. of the State of Maine*, 1877, II.
²⁹ Hakluyt, *Principal Navigations*, VIII, p. 112.
³⁰ Hakluyt, *Ibid.*, VII, pp. 375-376.
³¹ John Dee, *Private Diary*. Edited by J. O. Halliwell, 1842, p. 18.
³² A. H. Markham, *Voyages & Works of John Davis*, 1880, p. XVII.
³³ John Janes, *Narrative*, Markham, *Ibid.*, p. 1.
³⁴ John Davis, *World's Hydrographical Description*, 1595, Markham, *Ibid.*, pp. 206-207.
³⁵ Letter, Oct. 3, 1585, Markham, *Ibid.*, p. XIX.
³⁶ John Davis, *Narrative of his Second Voyage*, Markham, *Ibid.*, p. 27.
³⁷ It is impossible to identify this inlet.
³⁸ Davis, *Seaman's Secrets*, Dedication, Markham, *Ibid.*, pp. 232-233.
³⁹ Printed in Markham, *Ibid.*, pp. 193-228.
⁴⁰ For copy of Wright's map see Hakluyt, *Ibid.*, I, p. 356.

CHAPTER III

- ¹ Hakluyt, *Ibid.*, IX, p. 335.
² Hubert Bancroft, *Hist. of the Northwest*, I, p. 87.
³ Jones, *Hakluyt, Divers Voyages*, p. 7.
⁴ Purchas, *Ibid.*, XIV, p. 412.
⁵ Bancroft, *Ibid.*, I, p. 100.
⁶ Purchas, *Ibid.*, XIV, p. 416.
⁷ Bancroft, *Ibid.*, I, pp. 73-75.
⁸ Letter Sebastian Viscaino to his father, June 20, 1590. Hakluyt, *Principal Navigations*, X, pp. 164-166.
⁹ *Notes on Spanish Claims to America*, 1613 (?). Alexander Brown, *Genesis of U. S.*, II, pp. 672-673.
¹⁰ Geo. Birdwood, *Register of Letters*, p. 159.
¹¹ Minutes of the meeting of the General Court of the East India Company, held July 24, 1601. Henry Stevens, *The Dawn of British Trade*, 1886, p. 182.
¹² Letter, Dec. 7, 1601, *Acts of P. C.*, XXXII, New Series, p. 416.
¹³ Birdwood, *Ibid.*, pp. 22-23.
¹⁴ Narrative of Weymouth, Purchas, *Ibid.*, XIV, p. 309.
¹⁵ Meeting, Oct. 25, 1602, Stevens, *Ibid.*, p. 232.
¹⁶ Miller Christy, *Voyages of Foxe and James*, I, pp. XXXV-XXXVI.
¹⁷ Christy, *Ibid.* Appendix C.
¹⁸ *Coll. Mass. Hist. Soc.*, 3rd series, VI, p. 50.
¹⁹ Birdwood, *Ibid.*, pp. 86-87.
²⁰ *Foedera*, XVI, pp. 660-663.

²¹ The probability of the Portuguese being the first visitors to Hudson Bay is thoroughly discussed in G. M. Asher, *Henry Hudson*, pp. XCVI, XCVII, CLXXI.

²² *Western Planting*, p. 102.

²³ Hessel Gerritz, *Accounts*, Asher, *Ibid.*, p. 191.

²⁴ Purchas, *His Pilgrimage*, Asher, *Ibid.*, p. 140.

²⁵ Hessel Gerritz, *Descriptio et Delineatio, etc.*, Asher, *Ibid.*, pp. 181-182.

²⁶ Depositions now preserved at Trinity House, Miller Christy, *Ibid.*, II, pp. 633-634.

²⁷ A small island near Cape Wolstenholme. Hudson in entering the bay sailed between Digges Island and this cape.

²⁸ Purchas, *Ibid.* Asher, *Ibid.*, p. 142.

²⁹ Wm. Monson, *Naval Tracts*. Churchill, *A Coll. of Voyages and Travels*, 1743, III, pp. 396-397.

³⁰ For copy of charter see Christy, *Ibid.*, II, pp. 642-664.

³¹ Letter of John Chamberlain to Sir Dudley Carleton, Dec. 4, 1611, in R. F. Williams, *The Court and Times of James the First*, I, p. 153.

³² *Instructions*, April 5, 1612. Christy, *Ibid.*, II, pp. 636-638.

³³ The first demand was a query as to what should be done during the winter.

³⁴ Foxe's account of Button's Voyage. Christy, *Ibid.*, I, pp. 171-172.

³⁵ Briggs, *Treatise of the Northwest Passage*, Purchas, *Pilgrimes*, XIV, p. 425.

³⁶ Markham, *Ibid.*, p. 137.

³⁷ Wm. Baffin, *A Brief and True Relation*, Markham, *Ibid.*, p. 147.

³⁸ Christy, *Ibid.*, I, pp. 234-235. Letter is not dated, but Christy believes it was written after the second voyage. See p. 233.

³⁹ All these maps, save that of de Lisle, are reproduced with appropriate text, in Markham, *Ibid.*, pp. LIV-LVIII.

⁴⁰ Wolstenholme was behind the expedition, for when Foxe on his return from his voyage petitioned the Lords for his salary, they ordered Wolstenholme to satisfy the petitioner. *C.S.P. Dom.* 1631-1633, p. 319. Entry of April 28, 1632.

⁴¹ Letter, Feb. 16, 1630. Christy, *Ibid.*, I, pp. LXV-LXVIII.

⁴² Letter, Jan. 25, 1631. Christy, *Ibid.*, I, p. CXL.

⁴³ Christy, *Ibid.*, II, p. 359.

⁴⁴ Letter, Roe to Mayor of Bristol, Nov. 28, 1631, *Ibid.*, pp. CV-CVII.

CHAPTER IV

¹ Most scholars, notably Parkman, identify the River of May with the St. John's, though some prefer a river more to the north.

- ² Ribaut, *True and Last Discoverie of Florida*. J. W. Jones, Hakluyt, *Divers Voyages*, p. 103.
- ³ Hakluyt, *Principal Navigations*, IX, p. 55.
- ⁴ This map was published by De Bry in 1591. For copy see *Ibid.*, IX, p. 112.
- ⁵ Lane's letter to Hakluyt, *Ibid.*, VIII, pp. 325-326.
- ⁶ *Relation of Pedro Morales*, 1586, *Ibid.*, IX, p. 112.
- ⁷ Letter of Popham to James I, Dec. 13, 1607, Brown, *Genesis*, I, p. 146.
- ⁸ *Coll. Mass. Hist. Soc.*, 3rd series, VIII, pp. 101-103.
- ⁹ Edward Arber, *Capt. John Smith's Works*, pp. XXXIII-XXXIV.
- ¹⁰ Figure of speech for Newport's son.
- ¹¹ Smith, *True Relation*, Arber, *Ibid.*, pp. 19-20.
- ¹² Van Meteren, *Historie der Nederlanden*, see trans. in Asher, *Ibid.*, p. 148.
- ¹³ Brown, *Ibid.*, I, p. 184, is certain that the *True Relation* and the map with it are the papers mentioned by Van Meteren.
- ¹⁴ Smith's letter to Treas. and Council, 1608. Arber, *Ibid.*, p. 443.
- ¹⁵ Brown, *Ibid.*, I, p. 397.
- ¹⁶ Velasco to Philip III, March 22, 1611, *Ibid.*, I, p. 457.
- ¹⁷ Henry Briggs, *Treatise*, 1616, Purchas, *Ibid.*, XIV, pp. 423-424.
- ¹⁸ We have mentioned Spanish explorations which showed Lower California to be a peninsula. This was changed in the seventeenth century to a belief that it was an island, and the error was not corrected until the beginning of the eighteenth.
- ¹⁹ R. H. Major's edition of Strachey, p. 24.
- ²⁰ Waterhouse, *Relation*, E. D. Neill, *Virginia Company of London*, p. 337.
- ²¹ Purchas, *Ibid.*, XIX, p. 216. Document dated 1624.
- ²² *Ibid.*, XIX, p. 132.
- ²³ *Ibid.*, XIX, Chap. XX.
- ²⁴ *Foedera*, XIX, pp. 472-474.
- ²⁵ *Relation* sent by Yong to Windebanke, *Aspinwall Papers*, *Mass. Hist. Coll.*, 4th series, IX, p. 118.
- ²⁶ Yong to Matthew, October 20, 1634, *Ibid.*, pp. 115-116.

CHAPTER V

- ¹ H. Michelant and A. Ramé, *Relation Originale du Voyage de Cartier*, contains documents on colonisation in the sixteenth century and on trading rights in the seventeenth. These documents make no mention of a route to the South Sea.
- ² Champlain, *A Voyage to the West Indies*, 1859, pp. 41-42.
- ³ Slafter, *Voyages of Samuel de Champlain*, I, p. 250.

⁴ *Ibid.*, I, pp. 271-272.

⁵ Letter, April 5, 1609, Brown, *Genesis*, I, p. 278.

⁶ *Edits, Ordonnances Royaux, etc., concernant le Canada*, II, pp. 8-10.

⁷ 290th degree of longitude reckoned from west to east with the island of Ferro of the Cape Verdes as a starting point.

⁸ A tribe of the Hurons.

⁹ R. G. Thwaites, *Jesuit Relations*, XXIII, pp. 277-279.

¹⁰ *Rel.* 1640, *J. R.*, XVIII, p. 237.

¹¹ C. W. Butterfield, *Disc. of the N.W. by John Nicolet*, Chap. III.

¹² Blanchet, *Ibid.*, I, p. 150.

¹³ *Rel.* 1661-2, *J. R.*, XLVII, p. 147.

¹⁴ *Rel.* 1669-70, *J. R.*, LIV, pp. 189-191.

¹⁵ *Rel.* 1670-1, *J. R.*, LV, pp. 207-209.

¹⁶ Lalemant, *Rel.* 1659-60, *J. R.*, XLV, pp. 221-225.

¹⁷ This lake appears frequently in Indian accounts. It will be discussed more fully in a later chapter.

¹⁸ *Rel.* 1660-1, *J. R.*, XLVI, p. 251.

¹⁹ *Rel.* 1669-70, *J. R.*, LIV, p. 135.

²⁰ G. D. Scull, *Pierre Esprit Radisson*, p. 172.

²¹ Clement, *Lettres, Instructions et Memoires de Colbert*, III, Pt. 2, p.

393.

²² Chapais, *Jean Talon*, p. 83.

²³ Margry, *Mémoires et Documents des Origines Françaises*, I, pp.

113-114.

²⁴ *Memoir of La Salle's Project*, Margry, *Ibid.*, I, p. 330.

²⁵ Larger map shows the Ohio and an inscription stating that La Salle had used it to go to Mexico. The Ohio, however, on the original chart appears to have been inserted by a later hand. For copy of map see Winsor, *Ibid.*, IV, pp. 212-213. Smaller map about same date shows much the same thing, the inscription stating in this case that La Salle came from Lake Erie to the Ohio. For copy see *Ibid.*, p. 214.

²⁶ Parkman, *La Salle, etc.*, discusses on pp. 23-27 the evidence in regard to these voyages. His conclusions are presumably correct. However, it is only fair to say that F. E. Melvin has offered new evidence tending to disprove the claim that La Salle visited the Ohio. Alvord & Bidgood, *Explorations of Trans-Allegheny Regions*, p. 24.

²⁷ Memoir Talon to King, Nov. 10, 1670, Margry, *Ibid.*, I, pp. 87-88.

²⁸ Talon to King, Nov. 2, 1671, Margry, *Ibid.*, p. 93.

²⁹ Colbert to Talon, June 4, 1672, Clement, *Ibid.*, III, Pt. 2, p. 540.

³⁰ *Marquette's First Voyage*, *J. R.*, LIX, p. 87.

³¹ *Ibid.*, LIX, pp. 141-143.

³² Frontenac to Colbert, Nov. 14, 1674, Margry, *Ibid.*, I, p. 277.

³³ *Rel. des Decouvertes du Sieur de La Salle*, *Ibid.*, p. 439.

³⁴ La Salle's commission, May 12, 1678, *Ibid.*, p. 337.

³⁵ Hennepin, *A Continuation of the New Discovery*, 1698, p. 2.

³⁶ Letter of La Salle, Sept. 29, 1680, Margry, *Ibid.*, II, p. 54.

³⁷ *Ibid.*, VI, p. 24.

³⁸ La Barre to Colbert, Nov. 12, 1682, Margry, *Ibid.*, II, p. 302.

CHAPTER VI

¹ Letter to Joseph Mead, June 8, 1627, S. F. Streeter, *Papers Relating to the Early Hist. of Maryland. Md. Hist. Fund. Publication*, No. 9, pp. 65-66.

² *J. R.*, XVIII, p. 235.

³ Thomas Morton, *New English Canaan*, 1632. Peter Force, *Tracts*, II, p. 67.

⁴ E. Williams, *Virginia*, 1650. *Dedicatory Letter*, Force, *Ibid.*, III, p. 8.

⁵ W. W. Hening, *Statutes at Large of Virginia*, I, p. 262.

⁶ Alvord & Bidgood, *Explorations of the Trans-Allegheny Regions*, p. 46.

⁷ Force, *Ibid.*, II, p. 8.

⁸ *Ibid.*, pp. 13-14.

⁹ Hening, *Ibid.*, pp. 376-377.

¹⁰ Letter May 27, 1669. Alvord & Bidgood, *Ibid.*, pp. 175-176.

¹¹ Ludwell to Arlington, June 27, 1670. *Ibid.*, pp. 177-178.

¹² *Disc. of John Lederer*, reprinted by G. P. Humphrey, p. 3.

¹³ *Ibid.*, pp. 16-17.

¹⁴ *Journal of Fallam*, Alvord & Bidgood, *Ibid.*, p. 184.

¹⁵ Force, *Ibid.*, III, p. 11.

¹⁶ Denonville to Minister, June 12, 1686, Margry, *Ibid.*, V, pp. 11-13.

¹⁷ Jones, *Louisiana and Virginia Improved*, 1699. Fairfax Harrison, *Western Explorations. Va. Hist. Mag.*, XXX, pp. 330-331.

¹⁸ For copy of map see *Ibid.*, p. 336.

¹⁹ Gov. Spotswood to Council of Trade, Dec. 15, 1710. *Coll. Va. Hist. Soc.*, New Series, I, p. 40.

²⁰ Spotswood to Board of Trade, Aug. 14, 1718, *Ibid.*, II, p. 295.

CHAPTER VII

¹ *Découverte et Aventures de Mathieu Sagean*, Margry, *Ibid.*, VI, p. 102.

² Minister of Marine to d'Amblimont, April 28, 1700, *Ibid.*, pp. 169-170.

³ De Villermont to Dangeau, Aug. 15, 1701, *Ibid.*, pp. 173-17

⁴ Le Sueur's *Memoire*, *Ibid.*, p. 172.

⁵ Charlevoix to Count of Toulouse, Jan. 20, 1723, *Ibid.*, p. 525.

⁶ R. G. Thwaites, *New Voyages to North America by the Baron La Hontan*, from the English edition of 1703, I, Letter XVI.

⁷ Coxe, *Carolana*. French, *Hist. Coll. Louisiana*, Pt. II, pp. 230-231.

⁸ Obviously an error; it should read "opposite side."

⁹ The great lake in the west frequently mentioned by the Indians could not have been the Great Salt Lake, for this body of water is much too small and too unimportant for the one they described. Moreover, as will be seen later, the Indians spoke of there being Europeans on the shore of their lake who sailed in large vessels.

¹⁰ Hennepin, *A New Discovery*, p. 178.

¹¹ Le Moyne d'Iberville, *Mémoire de la Coste de la Floride*. Margry, *Ibid.*, IV, p. 332.

¹² Heinrich, *La Louisiane*, p. XXVIII. Iberville to Minister of Marine, June 18, 1698, Margry, *Ibid.*, pp. 58-62.

¹³ Instructions to Iberville, Sept. 22, 1699, Margry, *Ibid.*, pp. 348-354.

¹⁴ *Ibid.*, VI, p. 178.

¹⁵ *Memoir of Le Maire*, Jan. 15, 1714, Margry, *Ibid.*, VI, pp. 185-186.

¹⁶ Letter of La Harpe, May 1, 1720, *Ibid.*, p. 241.

¹⁷ Letter, Jan. 8, 1715, *Hist. Magazine*, III, p. 231.

¹⁸ Letter, March 15, 1716, *Ibid.*, p. 232.

¹⁹ *Relation du Sieur de Lamothe Cadillac*, July 31, 1718, Margry, *Ibid.*, V, pp. 125-127. This is not the memoir Bobé saw, since his letter antedates it, but it gives the substance of Cadillac's views.

²⁰ Letter of Remonville, Aug. 6, 1702, *Ibid.*, VI, p. 179.

²¹ Bienville to Minister, Sept. 6, 1704, *Ibid.*, p. 180.

²² Nicolas was not related to Robert Cavelier de La Salle, the explorer.

²³ It is not known to whom this letter was addressed.

²⁴ Letter of La Salle, Oct. 16, 1708, *Ibid.*, pp. 182-183.

²⁵ Memoir of Hubert, Oct., 1717, *Ibid.*, p. 189.

²⁶ Memoir of Guillaume de Lisle on the Western Sea. Printed in Buache, *Considerations Géographiques*, 1735. Buache publishes the memoir of 1700 with the additional evidence found in that of 1717 inserted in brackets, p. 26.

²⁷ Bobé's memoir is joined to his letter of Jan. 31, 1722, Ottawa Public Archives, *Amerique du Nord*, C¹¹, E-16, 1679-1759, pp. 52-179.

²⁸ This map is found in Samuel Engel, *Mémoires et Observations*.

²⁹ It would appear that there must be some mistake about these figures.

³⁰ Letter of Presle, June 10, 1718, Margry, *Ibid.*, VI, p. 385.

³¹ Andrew McF. Davis, *The Journey of Moncacht-Apé*, *Amer. Antiq. Soc. Proc.*, April, 1883, pp. 328-329.

³² Le Page du Pratz, *Histoire de la Louisiane*, III, pp. 137-138.

³³ Published in 1750 and corrected in 1775.

³⁴ Letter, June 7, 1720, *Public Arch.* Series B, XLII-2, 1720, p. 310.

³⁵ Charlevoix to Toulouse, Jan. 20, 1723, Margry, *Ibid.*, VI, pp. 521-522.

³⁶ Charlevoix to Morville, Apr. 1, 1723, *Ibid.*, p. 534.

CHAPTER VIII

¹ Ivanhoe Caron, *Col. du Canada*, pp. 23-33.

² Margry, *Ibid.*, VI, pp. 35-36.

³ King to La Barre, July 31, 1684, *Pub. Arch.*, Series B, XI, p. 95.

⁴ Nicolas Jeremie, *Relation*, *Bull. Soc. Hist. de St. Boniface*, II, pp. 15-17. See also Arthur Dobbs, *An Account of the Countries adjoining Hudson's Bay*, pp. 20-21.

⁵ Iberville captured Ft. Bourbon in 1694 and Ft. Nelson in 1697.

⁶ *Memoir*, Nov. 12, 1716, Margry, *Ibid.*, VI, pp. 496-498.

⁷ The Lake of the Assiniboels was Winnipeg, but as no one had as yet been to Winnipeg it may refer in this case to the Lake of the Woods.

⁸ Resolution of Council of Marine, Feb. 3, 1717, *Ibid.*, pp. 498-503.

⁹ La Nouë to Regent, Oct. 15, 1721, *Ibid.*, 512-513.

¹⁰ Letter to Pachot, Oct. 27, 1722, *Ibid.*, p. 514.

¹¹ Letter, Oct. 4, 1723, *Ibid.*, p. 541.

¹² Beauharnois and Hocquart to the King, Oct. 13, 1735, *Ibid.*, pp. 572-573.

¹³ Chaussegros de Lery, a French engineer.

¹⁴ This is marked on some maps as located a trifle south of the strait said to have been discovered by Juan de Fuca.

¹⁵ The map of de Lisle mentioned here is a chart other than the one we have reproduced.

¹⁶ Beauharnois to Maurepas, Oct. 15, 1730, *Pub. Arch.* C¹¹, A-52, pp. 172-173.

¹⁷ Memoir attached to the letter of Beauharnois and Hocquart, Oct. 1, 1731, *Pub. Arch.* C¹¹, E-16, pp. 278-284.

¹⁸ The name of this man is unknown. His memoir was sent to Maurepas about 1730 and contains a statement that he was sent out by the Duke of Orleans in 1720. A document in the *Pub. Arch.* B-52, 1720, dated June 22, 1720, states that the Council of Marine mentions some munitions purchased for the Sieur Sabrevois who was to undertake a voyage to the Western Sea. Sabrevois may be the author of the anonymous memoir. It is to be found in the *Pub. Arch.* C¹¹, E-16, pp. 271-277.

¹⁹ Beauharnois and Hocquart to Maurepas, Oct. 10, 1733, *Pub. Arch.* C¹¹, E-16, pp. 295-297.

²⁰ Council of Marine to Beauharnois, 1734(?). *Pub. Arch.* B-61. I, 1734, p. 78.

- ²¹ Aulneau to Faye, Apr. 25, 1735, A. E. Jones, *Aulneau Coll.*, pp. 33-34.
- ²² Nau to Richard, Oct. 24, 1734, *Ibid.*, pp. 25-26.
- ²³ Nau to Bonin, Oct. 2, 1735, *J. R.*, LXVIII, p. 283.
- ²⁴ Beauharnois to Maurepas, Aug. 14, 1737, *Pub. Arch.* C¹¹, A-67, 1737, pp. 120-121.
- ²⁵ Council of Marine to Beauharnois, Apr. 23, 1738, *Pub. Arch.* B-66, 1738, pp. 117-118.
- ²⁶ *Journal of La Verendrye*, 1738-1739, *Report of Canadian Archives*, 1889, p. 19.
- ²⁷ *Ibid.*, p. 23. See also O. G. Libby, *Some Verendrye Enigmas*, *Miss. Valley Hist. Rev.*, III, pp. 145-160.
- ²⁸ Minister of Colonies to Beauharnois, May 2, 1740, *Bull. Hist. Soc. de St. Boniface*, I, p. 29.
- ²⁹ *Journal of Chevalier de La Verendrye*, Margry, *Ibid.*, pp. 601-602.
- ³⁰ Minister of Colonies to La Jonquière, March 6, 1747, *Bull. Hist. St. Boniface*, I, p. 35.
- ³¹ Galissonnière to Minister, Oct. 23, 1747, Margry, *Ibid.*, p. 613.
- ³² We shall discuss these attempts later.
- ³³ Letter May 15, 1750, *Pub. Arch. Bib. Nat. Fonds Français*, 13,373, I, pp. 2-27.
- ³⁴ Coquart to Castel, Oct. 15, 1750, *Ibid.*, pp. 35-50.
- ³⁵ Castel to Coquart, March, 1751(?), *Ibid.*, pp. 51-59.
- ³⁶ *Journal of Saint-Pierre*, Margry, *Ibid.*, p. 642.
- ³⁷ L. J. Burpee, *Search for the Western Sea*, p. 277.

CHAPTER IX

- ¹ This expedition refers to the voyage of Zachary Gillam to the Rupert River, a voyage that led to the founding of the company.
- ² For charter see Beckles Willson, *The Great Company*, p. 515, *et seq.*
- ³ Samuel Hearne, *Journey to the Northern Ocean*, pp. XXVI-XXVII.
- ⁴ Henry Ellis, *Voyage to Hudson's Bay*, pp. 80-82.
- ⁵ Thomas Jefferys, *The Great Probability of a Northwest Passage*, p. 14.
- ⁶ De Fonte's letter, Jefferys, *Ibid.*, p. 7.
- ⁷ Dobbs, *An Account of the Countries adjoining to Hudson's Bay*, pp. 128-129.
- ⁸ See Mather's *Magnalia Christi*, 1820, II, p. 297.
- ⁹ Winsor, *Nar. & Crit. Hist.*, II, pp. 462-463.
- ¹⁰ Churchill, *Collection of Voyages*, II, p. 464.
- ¹¹ John Harris, *A Complete Coll. of Voyages*, II, p. 441.
- ¹² Middleton to Dobbs, Oct. 18, 1739, Harris, *Ibid.*, II, p. 441.
- ¹³ Middleton's letter of Jan. 21, 1737, *Ibid.*, p. 441.

¹⁴ Middleton's instructions, May 20, 1741, Middleton, *Vindication of Capt. Chris. Middleton*, pp. 99-103.

¹⁵ Middleton to Dobbs, Nov. 27, 1742, Middleton, *Ibid.*, p. 125.

¹⁶ Dobbs, *Ibid.*, p. 111.

¹⁷ Letters are found in Middleton, *Ibid.*, p. 108, and Dobbs, *Ibid.*, pp. 86-87.

¹⁸ Known to-day as Marble Island on the west coast of Hudson Bay, south of the Wager River.

¹⁹ *Instructions* in Ellis, *Ibid.*, pp. 109-110.

²⁰ Jefferys, *Ibid.*, p. 125.

²¹ Hearne, *Ibid.*, p. XXXIII.

²² *Ibid.*, pp. XL-XLI.

²³ Meridians and parallels are given on the map in Jefferys's book though not on the pen-and-ink sketch we have reproduced.

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